

IMPLEMENTATION STRATEGIES

Given the diversity of California communities, there is no universal approach to addressing compatibility issues between local entities and the military. This Handbook is designed to provide local and military planners, decision makers, agency land and resource managers, private landowners and developers, and the public with a comprehensive set of tools and processes that can be applied in any combination that is appropriate to meeting their unique needs.

Section 3 summarized the planning processes used by the State, local communities, private developers, and the military and identified opportunities for collaborative planning efforts. This section provides a reference to the range of planning tools available to address compatibility issues. Communities and military installations should select the tool or combination of tools that are appropriate for their situation and needs.

These planning tools are not meant to stop development from occurring, dictate a planning approach to be taken, or reduce the military's ability to conduct training activities and achieve its mission. The purpose of these tools is to mitigate existing and potential conflicts and facilitate land use compatibility, thereby sustaining military readiness and reducing impacts on local communities.

4.1 Planning Tool Format

This section describes the 30 planning tools described on Table 4-1. Each planning tool is presented using a standard format that addresses the seven topics described below.

- **Primary Responsibility.** The selection and implementation of any tool is a decision left to local communities and the military. This Handbook does not require the implementation of any specific set of tools.

While the tools presented in this section will benefit compatibility for all concerned, the lead on implementing the tool can be the local community, the military, or both. For each tool, the primary implementation responsibility is indicated by the check boxes at the beginning of each tool description.

Primary responsibility: ☒ Local ☐ Military

- **Definition.** Each planning tool is defined using a widely accepted definition.
- **Purpose.** The purpose of each planning tool is presented, with an emphasis on using it to mitigate conflicts between communities and military installations and operation areas.
- **Key Issues.** The practical limitations related to each planning tool are presented to help identify which tool(s) may be the most appropriate, based on the situation and needs.
- **Roles and Responsibilities.** The roles and responsibilities for both community and military planners are presented. For the purposes of this document, the term community planner refers to both city and county planners.

Implementation Strategies

Table 4-1. Summary of Planning Tools

	Local	Military	Airspace	Environmental	Land Use	Noise	Property	Zoning
1 Acquisition	•	•		•	•		•	
2 Air Installations Compatible Use Zones		•	•			•		•
3 Air Force General Plan		•			•			
4 Airport Land Use Compatibility Plan	•		•		•	•		
5 Avigation Easement	•	•	•		•		•	
6 Bird/Wildlife Strike Hazard Program		•		•				
7 CEQA / NEPA	•	•		•				
8 Cluster Development	•				•			•
9 Code Enforcement	•							•
10 Conditional Use Permit	•				•			•
11 Conservation Easement	•	•		•	•		•	
12 Conservation Partnering Authority	•	•						
13 Construction Standards	•	•						•
14 Deed Restrictions	•	•					•	
15 General Plan	•			•	•	•		
16 Habitat Conservation Tools	•			•				
17 Hazard Mitigation Plan	•			•	•			
18 Installation Encroachment Control Plan								
19 Installation Master Plan		•			•			
20 Joint Land Use Study	•	•			•			
21 Light and Glare Controls	•	•	•					•
22 Military Influence Area	•		•		•	•		
23 Memorandum of Understanding	•	•						
24 Operational Noise Management Program		•				•		
25 Range Air Installation Compatible Use Zone		•	•			•		
26 Real Estate Disclosure	•						•	
27 Regional Shore Infrastructure Plan		•				•		
28 Sound Attenuation	•					•		•
29 Subdivision Ordinance	•				•			
30 Zoning	•				•	•		•

- **Implementation and Maintenance.**

The implementation and maintenance methods for each planning tool are presented under this heading.

- **Resources and References.** Resources and references, including available Internet resources, are included. These resources provide additional or more detailed information on each planning tool.

4.2 Summary of Planning Tools

Each planning tool is listed in Table 4-1. Tools are arranged alphabetically and are cross-referenced by primary responsibility (local government or military) and topic areas. Each topic area relates to one or more of the compatibility factors presented in Section 2. These topic areas include:

- **Airspace.** Airspace tools can be utilized to mitigate impacts associated with military aircraft.
- **Environmental.** Environmental planning tools encourage the preservation and conservation of environmental or critical resources.
- **Land Use.** A variety of tools are included that promote land use compatibility. Many of these tools involve the preparation of installation or local community master or general plans. As long-term plans, these documents establish the entities vision and goals, and provide a detailed examination of future land use.

- **Noise.** These tools seek to mitigate the impacts of military or community related noise through various planning techniques including the establishment of noise overlay zones, promotion of real estate disclose, and integration of sound attenuation.
- **Property.** In order to protect critical lands adjacent to military installations, it may be appropriate for the military or local entities to acquire property or development rights.
- **Zoning.** Zoning ordinances establish land development standards, that when used appropriately, can contribute to the mitigation of land use compatibility conflicts. For example, zoning ordinances often establish the type of use appropriate in designated areas.

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

As a land use planning tool, property rights can be acquired through donation, easement, or the outright purchase of property for public purposes. Types of acquisition include the following:

- **Fee Simple Acquisition.** This option involves the purchase of property and is typically the most costly method to protect open space, sensitive, or critical areas. Cost and the need for a willing seller can be constraints.
- **Fee Simple/Leaseback.** A land trust is established when a government agency purchases the full title to a property, and then the leases it back to the previous owner. The land's natural resource and open space values are protected through lease controls that restrict land uses.
- **Conservation Easement (see also Tool 11).** Conservation easements can be acquired through a number of mechanisms, including donation or purchase. If they are donated, the donor could qualify for a federal income tax deduction making this option more desirable to the property owner. Conservation easements are a more cost effective method to acquire land than outright purchase.
- **Lease.** In cases where the landowner does not want to, or cannot make a permanent commitment, this may be a way to control land uses for a short timeframe. Leases can be obtained by government agencies or jurisdictions, non-profit organizations, land trusts, or private entities.
- **Management Agreement.** A management agreement is a specified plan under which the landowner or the land trust (or combination thereof) will manage the land. Management agreements last for a specific amount of

time making them a short-term approach to protecting land.

- **Eminent Domain.** A local government can use the power of eminent domain to appropriate private property for public use, in exchange for payment of fair market value, through the process of condemnation.

Purpose

The purpose of acquisition tools is to eliminate land use incompatibilities through estate market transaction and the local development process. Acquisition tools are particularly effective because they advance the complementary goals of shifting future growth away from military installations, and preserve community assets such as agriculture, open space, rural character, or sensitive natural habitats. Land use compatibility issues can be addressed by:

- Creating a land barrier between active military installation or training facilities and local land uses;
- Shifting future growth away from critical military lands;
- Protecting public safety by directing incompatible uses to other locations;
- Protecting the natural environment;
- Maintaining and protecting existing agriculture resources; and,
- Conserving open space.

Key Issues

- Acquisition can be expensive for local governments without the assistance of federal, state, or non-profit organizations.
- Even if funds are available for the purchase of property, future maintenance costs should also be considered and factored into any acquisition decision.
- Acquisition negotiations can be lengthy and complicated. Obtaining professional appraisals for the value of the rights to be

purchased can be controversial and time consuming.

- Certain types of acquisition can be complex and administratively challenging, requiring the local government to make a strong commitment to administering the program and educating residents and developers on its use.

Roles and Responsibilities

Community Planners. Planners should possess a clear understanding of the areas to consider for acquisition. Community officials should work jointly with military officials to determine these areas and reach consensus on acquisition priorities. Both local entities and military installations should establish and maintain partnerships with federal, state, and non-profit agencies as potential sources of acquisition funding.

Military Planners. Military planners and officials should work with local communities to educate the community on the need for the program. Military planners and officials should actively participate in the identification of appropriate areas for protection, and subsequently, acquisition. The military should obtain information about available federal grants, programs, and partnerships with non-profit organizations and share this information with the community.

Implementation and Maintenance

Implementation. The general steps for implementing an acquisition program are as follows:

- Identify areas of concern that also have a conservation interest;
- Explore possible partnerships with non-profit conservation groups or government agencies;
- Establish funding sources for purchase;
- Determine entity to administer the program;

- Adoption of enabling legislation by local governments (if they are to purchase easements directly); and,
- Negotiate purchase with willing sellers of land and easements.

Maintenance. Programs should be reviewed every year at a minimum.

Resources/References

- **Forever Florida.** This is a program in Florida for the acquisition of critical areas of concern.
<http://edis.ifas.ufl.edu/FE331>
- Also refer to these related Handbook tools: (5) Avigation Easement, (11) Conservation Easements, (12) Conservation Partnering Authority, and (14) Deed Restriction.

Luke Air Force Base Departure Corridor Project

The U.S. Army Corp of Engineers will serve as the principle real estate agent for a \$27.3 million easement acquisition project at Luke Air Force Base. The Air Education and Training Command (AETC) plans to acquire more than 2,100 acres of easements around Luke Air Force Base.

The acquisition project includes \$21.3 million targeted for easement rights for more than 1,700 acres, primarily in the southern departure corridor. The property located in the approach zones on the ends of the runways would be acquired to prevent nearby development from impacting flight operations. This is critical for the training of F-16 fighter pilots and maintained the safety and quality of life in the local community.

AETC will use the remaining \$6 million dollars to acquire land and install security improvements on 273 acres near the base munitions storage area located south of the base. Three million dollars is targeted for land purchases and \$3 million will fund security improvements. Acquisition of this land will physically connect the munitions storage area to the base proper and create a security buffer zone around the facility.

- U.S. Army Corp of Engineers, Los Angeles District

Private Acquisition Funding Sources in California

- **Donations.** Donations from private individuals for the acquisition of land. (This is free to the organization, but donations have to be found).
- **Bequests.** Bequests are when a landowner leaves rights to his / her property in a will or trust. In this case, the land does not transfer until the owner dies.
- **Project Campaigning.** Project campaigns can be used to raise the money to fund the protection of open space. This is especially useful when a private developer is trying to develop land that is valued by the community.
- **Land Trades.** Land of no significant open space value can be donated and then sold to protect lands of greater value related to the protection of open space. In this case, the land trust must make clear to the donor their intentions for the property.
- **Loans.** Land trusts can apply for loans if they do not have the funds needed for a purchase. It is possible to receive a loan from private individuals, local businesses, banks, corporations, and non-profit organizations.
- **Revolving Funds.** Land trusts can establish and maintain a fund so that money is always available for the acquisition of land. There are several methods for starting a revolving fund.
- **Charitable Creditors.** These are individuals or organizations that can back up a land trust's purchase of land if the land trust does not have secured funding. They agree to pay back the loan if the land trust, for any reason, is unable to pay.

Public Acquisition Funding Sources in California

- **Federal Land and Water Conservation Fund.** The Land and Water Conservation Fund is authorized to provide up to \$1 billion a year for federal acquisition of open space land.
- **General Funds and Bonds.** These are state and local level funds. General funds, general obligation bond appropriations, and state and local taxes can all be sources of funding.
- **State Department of Parks and Recreation.** This can only be used if the land acquired is going to be in the State Park system.
- **Habitat Conservation Fund.** This is the State's most important source for acquiring open space. The California Wildlife Protection Act requires the State to allocate a minimum of \$30 million a year through the year 2020 to the Habitat Conservation Fund to purchase wildlife habitat. This funding source can help acquire open space lands if they have habitat value.
- **Wildlife Conservation Board.** The Board purchases lands for the Department of Fish and Game. They manage the expenditures under Proposition 117 Habitat Conservation Fund.
- **State Grants and Low interest Loans.** The State can be a source of money for matching grants and low interest loans for land acquisition.
- **Payment in Lieu of Dedication.** Land developers can be required by a local government to make a payment to a municipal trust fund for open space acquisition as a way to mitigate a project's impacts on open space. This can be done in addition to, or instead of, having the developer set aside land on their project site.
- **Special Assessment District.** A special tax district can be another way to acquire the funds necessary to obtain open space lands.
- **Tax Return Funding.** This option gives California taxpayers the option to direct a donation towards the acquisition of habitat lands under the California's Endangered Species Income Tax Donation Checkbox Program. These funds are controlled by the Department of Fish and Game through its Natural Heritage Division. To receive funding from this source, a project must demonstrate that an endangered species or threatened species will be protected.
- **Tobacco Tax.** Funds available from this source are split evenly between park projects and wildlife projects. There are no restrictions on these funds, and they can be used for land acquisition, restoration, maintenance of habitat or parks, and other related activities.
- **Environmental License Plate Fund.** This fund can provide money for acquiring land for environmental protection. This fund can make direct grants to non-profit organizations.
- **Gas Tax.** Gas Tax funds can be used to mitigate the effects of transportation development, including the purchase of land.
- **Wildlife Restoration Fund.** This fund provides about \$750,000 a year and must be used for habitat protection projects that benefit hunters, anglers, and boaters.

Primary responsibility: ☐ Local ☒ Military

Definition

The Air Installations Compatibility Use Zones (AICUZ) program is a DoD planning program that was developed in response to incompatible urban development and land use conflicts around military airfields. (Note: some Services use the singular form, Air Installation Compatible Use Zone) The AICUZ program seeks to provide information on compatibility, develop a cooperative relationship between communities and military installations, and providing land use compatibility guidelines that protect public health and safety and maintain military readiness.

Purpose

The AICUZ program has two objectives: (1) to assist local, regional, state, and federal officials in protecting the public health, safety, and welfare by promoting compatible development within the AICUZ area of influence; and (2) to protect operational capabilities from the effects of land uses that are incompatible with aircraft operations. While prepared by or for a military installation, the primary users of an AICUZ study are the local communities surrounding the installation or an offsite location (such as auxiliary fields or training areas). The AICUZ study is also a tool used by the installation's community planner to evaluate proposed projects (both on and off the installation) for their compliance with the information presented in the AICUZ study.

Areas contiguous to military installations often provide attractive land development opportunities. Certain types of development are not compatible with the high noise and high potential for aircraft accidents associated with airfield activities. In the absence of compatible land use controls, inappropriate uses may occur near or adjacent to the installation causing eventual conflicts between flight operations and landowners.

Key Issues

- AICUZ studies, and other land use compatibility plans, such as the Airport Land Use Compatibility Plan (ALUCP), are interrelated. The provisions of the AICUZ become mandatory when incorporated into the ALUCP.
- AICUZ studies are designed to provide information, and are not regulatory documents.
- The AICUZ study needs to reflect the current and projected operational environment and should be coordinated closely with an installation's Airfield Operations Board and its flying units.
- To help with implementation, materials prepared for public distribution and use should clearly state the issues involved and the areas of concern.

Roles and Responsibilities

Community Planner's Role. Local governments should be included in the AICUZ planning process and be prepared to provide technical advice to the military in interpretation of the community's general plan, zoning ordinance, and description of existing land uses. Acceptable methods to deal with identified land use conflicts (existing or potential) should also be discussed.

Military Planner's Role. The military planner's role in the process will vary depending on whether the study is conducted in-house or if the study is being prepared using assistance from an outside source. In general, the military planner performs the following tasks:

- Monitor changes in base operations to determine potential impacts on the AICUZ study;
- Identify the need for an AICUZ update and coordinate the update and funding through the Air Force;
- Evaluate base development projects based on AICUZ criteria and requirements;

- Review community project proposals and provide input in relation to AICUZ compatibility guidance;
- Coordinate with local communities to ensure understanding of AICUZ and land use compatibility issues; and,
- Brief local planners and political bodies on AICUZ program studies and updates.

Implementation and Maintenance

Implementation. Local governments have the ability to implement AICUZ guidelines through their police powers, which allow them to protect public health, safety, and welfare. The state conveys these powers to local governments so they can adopt and enforce zoning regulations and other land use controls. As such, the success of the AICUZ program depends on its voluntary acceptance and use by local governments, land owners and developers, and other agency officials. These groups and individuals must understand the recommendations from the AICUZ study.

In order to ensure successful implementation, the following techniques will assist in implementation of the AICUZ recommendations.

- Inform the public and government agencies of the AICUZ program (i.e. formal presentation of AICUZ program by installation personnel).
- Establish both a formal and informal network of contacts to routinely exchange planning information (i.e., Memorandum of Understanding [MOU], establishment of technical and/or working groups with community planners and leaders).
- The local government should use the AICUZ information to identify existing incompatible land uses.
- The local government should include the installation planner as part of project application and CEQA reviews in areas identified in the AICUZ study as having potential compatibility issues.

Maintenance. The AICUZ Program Manager (the installation lead on the project and often the installation's community planner) reviews the AICUZ operational and maintenance data at least once every two years or as part of an Environmental Impact Analysis Process (EIAP) evaluation, or in response to a significant change in aircraft or operations. This review determines if the installation needs an AICUZ update.

Resources/References

- **The Environmental Conservation and Planning Directorate, Air Force Center for Environmental Excellence (AFCEE/TD)** is responsible for executing the Air Force's AICUZ program.
<http://www.afcee.brooks.af.mil/ec/noise/aicuz/aicuz.asp>
- **Air Combat Command's** brochure *Aircraft Noise – An Environmental Perspective*, explains basic noise metrics and how they are used to characterize the noise environment and support community relations.
<http://www.cevp.com/aicuz.html>
- Sample Memorandum of Understanding between an installation and local planning and land use approval agencies.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/MOUSHawAFBSep2000.doc>
- **Chief of Naval Operations Instruction 11010.36** describes the Navy and Marine Corps AICUZ program. It's available at:
http://neds.daps.dla.mil/Directives/11010_36b.pdf
- **NOISEMAP** software can be used to assess noise potential. This can be downloaded from the following Web site:
<http://www.afcee.brooks.af.mil/ec/noise/noisemodels/noisemodels.asp>

Primary responsibility: ☐ Local ☒ Military

Definition

The Air Force General Plan (AFGP) is the primary document that provides an air force installation commander and other military decision makers with a condensed picture of whether or not an installation has the physical assets and delivery system to support its mission.

Purpose

The purpose of the AFGP is to provide a general assessment of the installation's infrastructure and attributes for the purpose of gauging the installation's development and growth potential.

Key Issues

- The general plan is not a lengthy treatment or detailed study of base development issues or concerns. However, the general plan is the vehicle to document and establish the need for more detailed study.
- Detailed plans for specific area are performed using an Area Development Plan (ADP), which is similar to the specific plan used by local governments.

Roles and Responsibilities

Community Planners. Although community planners do not use the AFGP, they can assist their military counterparts with needed data collection (i.e., transportation infrastructure information, socioeconomic data).

Military Planners. In the development of an Air Force General Plan, the base community planner is responsible for the following:

- Establishing a working relationship with all decision makers and others who use the AFGP;
- Ensuring that all the users of the AFGP understand its importance; and,

- Being aware and monitoring all planning-related base activities; for example, site approvals for all on base construction projects.

Implementation and Maintenance

Implementation. The base community planner should take a proactive approach regarding implementation of the AFGP; it is one of the most important documents that decision makers will use in making short- and long-term decisions affecting the base and surrounding communities. Development proposals on the installation should be consistent with the recommendations of the AFGP.

Maintenance. The AFGP is a living document that requires, at minimum, a yearly review, with a comprehensive update typically done on a 5-year cycle. Plan reviews and updates should be done by the base community planner and base leadership prior to its final review and approval by the Wing Commander. If the AFGP includes information related to tenant organizations (a unit or organization that does not functionally report to the base commander), they should review the plan and provide comments and updates.

Resources/References

- **Air Force Instruction (AFI) 32-706, Comprehensive Planning.** This document provides guidance on the development of the AFGP and is available through the following Air Force sponsored website
<http://www.e-publishing.af.mil/>
- **General Plan Guide.** Available on the Air Force Center for Environmental Excellence (AFCEE) website.
<http://www.afcee.brooks.af.mil>
- **Air Force Pamphlet 32-1010, Land Use Planning Pamphlet.** This document is available at the following website.
<http://www.e-publishing.af.mil/>

- **AFCEEs Planning Primer** This document is available at the following website.
<http://www.afcee.brooks.af.mil/ec/mmgrp/pages/primer/planprm.htm>
- **AFI 31-101, USAF Physical Security.** This document is available at the following website.
<http://www.e-publishing.af.mil/>

Primary responsibility: ■ Local □ Military

Definition

An Airport Land Use Compatibility Plan (ALUCP) is “a plan, usually adopted by a County Airport Land Use Commission (ALUC) or other entity established to accomplish land use compatibility planning, which sets forth policies for promoting compatibility between airports and the land uses which surround them.” (*California Airport Land Use Planning Handbook*, January 2002).

The California law governing creation of ALUCs applies to every county in California having a public airport. The statute also allows counties to use an alternative to ALUCs to accomplish airport land use compatibility planning. For the purposes of this document, the term “ALUC” refers to both officially designated ALUCs and the alternative entities that perform the same functions.

The California State Aeronautics Act typically refers to these documents as ALUCPs. These plans are also referred to as Comprehensive Land Use Plans (CLUPs), airport land use policy plans, and airport environs land use plans. All of these plans perform the same purpose and are required to conform to state law.

ALUCPs should not to be confused with airport master plan. Airport master plans are designed to plan for airport facilities, circulation, infrastructure, security, and other factors that guide the orderly development of on-airport land uses.

Purpose

The purpose of the ALUCP is to:

- Provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the ALUC.
- Safeguard the general welfare of the people living near airports and the public in general (California Public Utilities Code, Section 21675(a)).

Key Issues

- State statutes require that, once an ALUC has adopted or amended an ALUCP, the county—if it has land use jurisdiction within the airport influence area—and any affected cities must: (1) update their general plans and any applicable specific plans to be consistent with the ALUC’s plan within 180 days (Government Code, Section 65302.3); or (2) take the required steps to overrule all or part of the ALUC’s plan. If a county or city fails to take either action, then it is required to submit all land use development actions involving property within the airport influence area to the ALUC for review (Public Utilities Code, Section 21676.5(a)). (*California Airport Land Use Planning Handbook*, January 2002).
- The primary consequence for communities not meeting the 180-day deadline is that the ALUC can begin requiring – if it is not already doing so – that all of the jurisdiction’s land use actions, regulations, and permits be submitted to the commission for review (Section 21676.5(a)).
- State law (Section 21675(a)) limits amendment of an ALUCP to no more than once per calendar year.
- ALUCPs, and other land use compatibility plans such as the Air Installation Compatible Use Zone (AICUZ) study and airport master plan, are interrelated. As an example, ALUCP shall be consistent with the safety and noise standards in the AICUZ study prepared for a military airport (Public Utilities Code, Section 21675(b)). When preparing an ALUCP, consideration should be given to all land use compatibility plans for inclusion and coordination.

Roles and Responsibilities

Although typically developed by the County ALUC, community and military planners should take an active role and participate in the ALUCP planning process.

Community Planner's Role. Community planners must incorporate the policies of the ALUCP into local general plans, zoning ordinances, subdivision regulations, and any other applicable development regulations and/or plans. To ease the adoption and incorporation of these provisions, community planners should participate in the development of the ALUCP, identifying any areas of potential conflict prior to adoption.

To ensure consistency between the ALUCP and local plans:

- Ensure the implementation criteria for the ALUCP recommendations and general plan policies are consistently applied; and,
- Provide on-going maintenance of the established policies and recommendations within both planning documents.

Military Planner's Role. ALUCs have the option of developing a compatibility plan for any federal military airport in their jurisdiction (California Public Utilities Code, Section 21675(b)). Military personnel can assist by developing cooperative relationships with the ALUC and actively participate in the development of the ALUCP. Military planners can be essential in ensuring the accurate inclusion of the AICUZ findings into the ALUCP. This will enhance compatible land use planning in proximity to military airports.

Implementation and Maintenance

Implementation. Adoption and successful implementation of the ALUCP involves the cooperation and participation of affected local jurisdictions and military installations. During the adoption phase, collaboration usually occurs through both informal and formal means. As a

fundamental tool used by airport land use commissions (or their alternative) in land use review, ALUCPs can be implemented in part through incorporation in local jurisdictions general plans.

Maintenance. Airport Master Plans and ALUCPs should be updated as often as necessary to provide current information to decision makers. Periodic reexamination (every 5-10 years) of the entire plan is strongly encouraged to keep it up to date with changes in state law, local land uses, airport development and activity, and current noise and safety compatibility concepts. The plan should also be updated to reflect major changes in airport operations or land use changes proposed by local jurisdictions.

Resources / References

- ***The California Airport Land Use Planning Handbook.*** Published by the California Department of Transportation Division of Aeronautics, its purpose is to support the State Aeronautics Act (California Public Utilities Code, Section 21670 et seq.), which established statewide requirements for the conduct of airport land use compatibility planning. In addition, it serves as the primary source of information regarding compatibility plans.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>
- **The California Department of Transportation, Division of Aeronautics.** Division of Aeronautics staff is available to respond to inquiries regarding state law, compatibility criteria, review procedures, and any other matters involving airport land use commissions.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/index.php>

- **Other ALUCs.** The experience of other ALUCs is a valuable information resource. Copies of adopted plans can be obtained from other commissions or the Internet. Other commissions are generally willing to discuss methods for developing such plans and “lessons learned.” The Division of Aeronautics maintains a list of contact persons and phone numbers for each of the airport land use commissions in the state.
- **Funding.** The California Department of Transportation has provided grants to local agencies for the preparation of compatibility plans in the past. This funding has primarily come from the California Aid to Airport Program (CAAP) grants, which cover 90% of the cost of an ALUCP. Funding availability varies from year to year. Additional funding possibilities include the Federal Aviation Administration’s (FAA) Airport Improvement Program.
- **Aeronautical GIS Maps.** This site provides links to GIS information and maps pertaining to airports in California.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/markel.php>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

An easement is a non-possessory right to use land owned by another party. An avigation easement is an easement that grants the holder one or more of the following rights: the right-of-flight; the right to cause noise, dust, or other impacts related to aircraft flight; the right to restrict or prohibit certain lights, electromagnetic signals, and bird-attracting land uses; the right to unobstructed airspace over the property above a specified height; and, the right of ingress/egress upon the land to exercise those rights.

Avigation easements transfer certain property rights from the owner of the underlying property to another entity. This entity could be the owner of an airport or, in the case of military airports, to a local government agency or authorized federal agency on behalf of the military. The DoD is not authorized to accept avigation easements. Historically, if the military desires such easements, there are several ways they can be obtained. The US Army Corps of Engineers serves as the negotiator and the principle real estate agent for the Army and Air Force. The Navy and Marine Corps use the Naval Facilities Engineering Command to negotiate and acquire real property interests, including easements.

Purpose

Entities acquire avigation easements to the airspace over neighboring properties in order to: (1) prevent construction of buildings and towers, planting of trees, installation of lighting, or any other development that might interfere with aircraft takeoff and landing, or (2) protect against liability for any nuisance caused by aircraft using the airport (i.e. noise, fumes, and vibration) that might impact the use and enjoyment of properties adjacent to an airfield or under its flight paths.

Key Issues

- Communities may view it as outside their authority to require avigation easements

on behalf of a federal entity, but if public health and safety benefits can be linked, these easements may be justified.

- Finding the appropriate entity to hold the avigation easement.
- Although local governments are permitted under California law to use eminent domain for the acquisition of avigation easements for civilian airports, entities should seek legal consultation prior to using a formal condemnation process to obtain an avigation easement related to a military airfield. Key to this determination will be the finding of public benefit, perhaps tied to protecting public health and safety.

Roles and Responsibilities

Community Planner's Role. Local governments should work cooperatively with military installations, developers, and property owners to determine the applicability of avigation easements on specific properties near military air operations. Local governments should ensure that developers building in hazards areas are aware of and educated about the impacts of military operations.

Local governments may decide to create a program for the voluntary offering of avigation easements within identified hazard areas (clear zone, accident potential zones, etc.). This could be tied to a conservation easements program (see Tool 11) or similar arrangement.

Military Planner's Role. Military planners can assist by working closely with local governments to determine areas for which avigation easements should be obtained. Many of these areas are identified through other planning efforts, such as the AICUZ program. Military installations can then work with local governments, trusts, and other federal agencies, such as the U.S. Army Corp of Engineers, to purchase easements, if desired.

Implementation and Maintenance

Implementation. The implementation of avigation easements is usually a complex undertaking. Local governments and military installations must work cooperatively, not only with each other, but with affected property owners as well. Education about the impacts of military installations on the community and of the military's need for training will be vital to ensure a thorough understanding of the reasons for avigation easements. It is generally more common for avigation easements to be acquired by the military with assistance from the US Army Corp of Engineers. However, local entities can be equally effective in using existing planning tools and the development process to seek voluntary avigation easements from developers.

There are several basic steps involved in the acquisition of avigation easements by the U.S. Government on behalf of a military installation. These steps are as follows:

- The need for the avigation easement must be clearly established and identified;
- An appraisal must be conducted to determine market value;
- Environmental documentation must be prepared to satisfy NEPA requirements, typically an Environmental Assessment (EA), for the acquisition of avigation easements;
- A written offer must be made to the landowner or authorized agent;
- The landowner, in writing, can either accept the government offer or make a counter offer;
- Once negotiations are complete, the terms are put in writing and the both entities formally accept the agreement; and,
- Parties close escrow and formally document the easement.

It is generally the policy of the military to acquire the minimal real estate easements needed to

sustain military operations and force protection of critical assets.

Avigation easements are deemed a property right and to be valid and enforceable, must be recorded by the local county Register of Deeds. Recording the avigation easements generally requires preparation of a formal legal document which is then recorded against the title to the real property. This document constitutes notice of potential hazards or restrictions placed on the property to anyone checking on the title. Because this document is recorded, it binds future owners even if they are unaware of its existence at the time of the purchase. All documents affecting title, including avigation easements, are referenced in a preliminary title report issued by a title insurance company.

Maintenance. Properties affected by avigation easements should be periodically reviewed for compliance.

Resources / References

- This **sample avigation easement** was executed in 1995 between the City of Livermore (owner of the Livermore Airport) and a housing developer in the city. The easement was a condition of the city's approval of a housing project by the developer.
<http://home.netvista.net/~hpb/av-ease.html>
- **California Department of Transportation, Noise and Aerospace Projects.** This document can be found at this website.
<http://www.dot.ca.gov/hq/planning/aeronaut/documents/ALUP/CT%20ALUPH%20Appendix%20D.pdf>
- Also refer to these related Handbook tools: (1) Acquisition, (11) Conservation Easements, (12) Conservation Partnering Authority, and (14) Deed Restriction.

Primary responsibility: ☐ Local ☒ Military

Definition

The Bird/Wildlife Strike Hazard (BASH) program is aimed at minimizing collisions between military aircraft and birds. Knowledge of where birds travel, nest, and feed helps DoD avoid problem areas, and therefore save lives and avoid the destruction of valuable aircraft. The program considers not only wildlife within the confines of the airfield, but also in neighboring areas. The BASH program covers predatory birds, nuisance flocking birds (gulls), and migratory geese and ducks. In addition to birds, the BASH program also addresses other animals that could pose a hazard to aircraft operations including coyotes, deer, moose, and rabbits.

Purpose

The objective of the BASH program is to reduce the potential for collisions between aircraft and birds or other animals, and to minimize damage and injuries when collisions occur. The BASH program promotes land management practices that minimize bird attractants, and safety procedures to recognize, control, and avoid hazardous bird concentrations.

Key Issues

- Some land use practices increase the attractiveness of existing geographic features to wildlife, such as open bodies of water or wetlands that serve as nesting areas for gulls, shore birds, and waterfowl.
- On-airport bird control activities are often needed to reduce bird-strike hazards. However, the effectiveness of these activities is reduced by off-airport land use practices that attract birds.
- Reporting of bird strikes is essential to the success of the program.

- The creation of new water bodies from development runoff or water features on golf courses can be a significant factor in increasing bird hazards.
- In order for BASH programs to be effective, military and federal agencies need to involve local communities that control land uses and activities within airport and aircraft operating areas.

Roles and Responsibilities

Community Planner's Role. Local governments that want to reduce bird hazards to military installations should understand the potential issues associated with BASH programs. Community planner involvement could include activities that:

- Inform and educate the public and government agencies about BASH and related land use issues.
- Establish both a formal and informal network of public and military contacts to routinely exchange planning information (i.e. Memorandum of Understanding, establishment of technical and/or working groups with military, community, and resource planners).
- Identify land uses and other activities that should not be sited within airport and aircraft operational areas because of their potential to attract birds and other wildlife.
- Work with military installations to reduce the impact of existing land uses that could increase wildlife hazards.

Military Planner's Role. Some installations have full-time personnel to assist in creating, monitoring, and implementing BASH.

Responsibilities can include:

- Identifying a BASH coordinator to implement the program and work with local communities;

- Establishing a Bird Deterrent Dispersal Team to identify potential hazards, maintain airfield conditions, and monitor day-to-day activities that might impact safety;
- Verifying and mapping of bird and other wildlife animal habitats;
- Identification of potential base activities that could pose problems;
- Working with adjacent and nearby communities to minimize land use activities that attract bird and other wildlife that could pose problems to aircraft;
- Implementation of pest control programs; and,
- Formally and informally establishing public contacts for information exchange.

Implementation and Maintenance

Implementation. The main focus of BASH remains bird hazards. However, Wildlife Biologists from the Department of Agriculture's Wildlife Services Division in conjunction with the individual bases are beginning to treat each airfield as its own ecosystem. BASH programs are now based on each base's specific issues and requirements. National and international military and other public and private agencies have organized to promote educational, technical, and related research activities. An implementation program generally encompasses all actions and techniques that may identify, reduce, or eliminate bird or other animal hazards to aviation, including:

- Bird and other wildlife strike reporting/statistics;
- Bird management and control techniques;
- Research on new technologies to reduce wildlife hazards;
- Training in airport wildlife management;
- Policy and airport standards concerning wildlife hazard;

- Land use and environmental issues concerning airports;
- Bird migration and general ornithology related to aviation; and,
- Remote sensing and modeling to detect and predict bird movements.

Development and implementation of an effective BASH program requires constant interaction between military sections covering natural resources, aviation safety, and air operations, as well as pilots, aircrews, and natural resource planners. Habitat modifications and scaring birds away from the runways is an integral part of the answer, but understanding the behavior and movements of birds in relation to the airfield environment and military training routes is also a critical factor in reducing bird strikes.

Maintenance. BASH programs should be periodically reviewed for effectiveness and updated as appropriate.

Resources / References

- **Bird Strike Committee USA.** This is a volunteer organization directed by a 9- to 12-person steering committee consisting of 2-3 members each from the FAA, USDA, DoD, and aviation industry.
<http://www.birdstrike.org/birds.htm>
- **Navy and Marine Corps Instruction Manuals.** Current Navy and Marine Corps instructions implementing the BASH program include: OPNAVINST 3750.6R, OPNAVINST 5090.1B, OPNAVINST 11010.36B, and NAVFAC Procedural Manual P-73. Examples of current BASH Plans, local implementing instructions, and SOP's are provided as appendices to the NAVFAC Procedural Manual P-73.
<http://www.safetycenter.navy.mil/aviation/operations/bash/>
- **Navy Safety Center.** A repository for all bird/animal strike reports and maintains the strike database.
<http://www.safetycenter.navy.mil>

- **Air Force, Aviation Safety Division.**
This division serves as the Air Force's point-of-contact for technical assistance pertaining to the BASH program.
<http://afsafety.af.mil/AFSC/Bash/home.html>
- **Hazardous Wildlife Attractants on or Near Airports,** FAA Advisory Circular 150/5200-33A
- **Airport Safety,** Environmental Protection Agency Regulation, 40 CFR, Section 258.10, "Airport Safety", relates to landfills near municipal airports, but provides information relevant to military airports
<http://www.epa.gov/epahome/cfr40.htm>

Please see the next page

Primary responsibility: ■ Local ■ Military

Definition

The California Environmental Quality Act (CEQA) was enacted in 1970 and requires local governments to consider the potential environmental impacts of a project before they approve it. CEQA also requires that a project's environmental impacts be disclosed to the public so community members have an opportunity to make informed comments on proposed land use decisions. CEQA is modeled after the federal National Environmental Policy Act (NEPA).

The NEPA is the federal law, effective on January 1, 1970, that established a national policy for the environment and requires federal agencies (1) to become aware of the environmental ramifications of their proposed actions, (2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and (3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

Purpose

The primary purpose of CEQA ([Public Resources Code, Section 21000 et seq.](#)) is to develop and maintain a high-quality environment now and in the future. According to statute, CEQA has four major purposes:

- Inform governmental decision makers and the public about the potential significant environmental effects of proposed activities;
- Identify ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring mitigation actions when the governmental agency finds the changes to be feasible; and,
- Disclose to the public the reasons for approval of a project that has significant environmental effects.

CEQA applies to projects undertaken by a public agency, funded by a public agency, or that require issuance of discretionary permits by a local or state public agency. A project is defined as any action that has a potential for resulting in physical change to the environment, and is an activity that may be subject to several discretionary approvals by government agencies (i.e., construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit). A project is exempt from CEQA if it can be said with certainty that there is no possibility that the activity in question will have a significant effect on the environment,

NEPA's purpose, as stated in Section 2 of NEPA legislation, is to "encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to enrich the understanding of the ecological systems and natural resources important to the Nation..." NEPA ensures that the environmental impacts of a proposed action, and potential alternatives to the action, will be considered by a Federal agency before it decides to fund and implement the action. The process required under NEPA is intended to increase the quality of decisions because it demands a full understanding of the various impacts, and because input must be received from a range of stakeholders. Emergency exceptions are made when the immediate health and safety of people are threatened.

Key Issues

- The threat of litigation under CEQA from project opponents can slow down project approvals.
- Although CEQA offers planning benefits at the project level, regional environmental impacts are often not considered.
- The NEPA process generally takes a longer period of time than the CEQA process.

- NEPA generally requires that any cost/benefit analysis prepared for the project be incorporated into or attached to the environmental impact statement (EIS). Incorporation of cost/benefit information is optional under CEQA unless it constitutes the basis for rejecting an environmentally superior alternative.
- NEPA requires that the project and each of the alternatives be analyzed equally and compared. Under CEQA, the analysis of significant effects of alternatives can be evaluated in less detail than the effects of the proposed project; however, each environmental issue should still be addressed for each alternative to allow for comparison of impacts with the proposed project.
- CEQA requires agencies to implement feasible mitigation measures. CEQA also requires the preparation of a Mitigation Monitoring or Reporting Program ([*CEQA Statutes Section 21081.6*](#)).
- The standards of significance under NEPA generally are less sensitive than under CEQA.

Roles and Responsibilities

Community Planner's Role. Community planners should consider the implications to on-going military operations during the CEQA/NEPA process. Areas of particular concern include: public safety, aviation safety, and land use compatibility. In addition, environmental impact reports (EIRs) should examine the proposed project's compatibility with military installations and operation areas, especially in the Military Influence Area of the installation.

The community planner should also respond to NEPA Notice of Intent (NOI) to prepare an EIS and public comments periods on EIS that relate to compatibility between military installations and operation areas and areas covered by the jurisdictions general plan.

CEQA Notification

AB 1108, passed in 2002, amends the CEQA to provide military agencies with early notice of proposed projects within two miles of installations or underlying training routes and Special Use Airspace (SUA). To obtain this notification, military installations must provide the local planning agencies in their area of the installation's contact person and the relevant information and boundaries of the installation's low-level flight path, military impact zones, or SUA. The local lead agency is required to give notice to the military installation of any project within those boundaries if: (1) the project includes a general plan amendment; (2) the project is of statewide, regional, or area wide significance; or (3) the project is required to be referred to the airport land use commission or appropriately designated body. This notification will provide the military with an opportunity to provide early input, so that potential conflicts can be evaluated and addressed proactively.

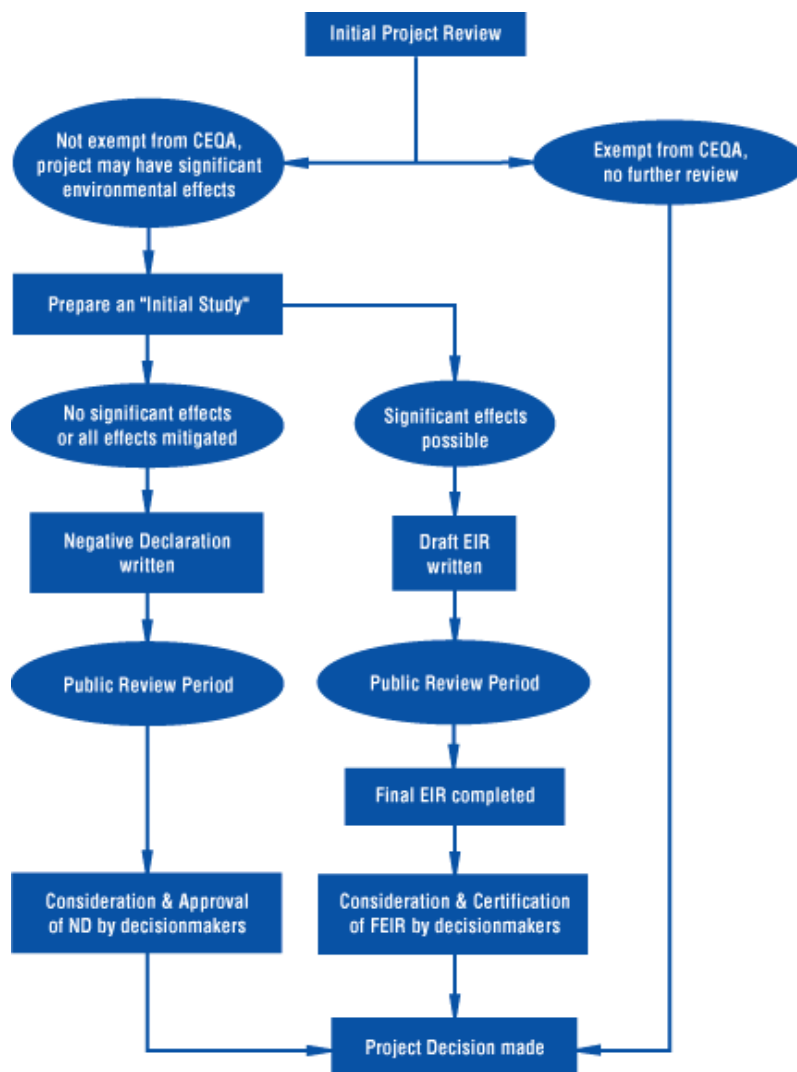
Military Planner's Role. The military planner can assist by being an active participant in the CEQA/NEPA process. The military can utilize these processes as an opportunity to make public comment in areas such as public safety, aviation safety, and land use compatibility. The military planner can respond to the CEQA Notice of Preparation (NOP) so military concerns and issues can be noted during the early stages of the local planning process.

Implementation and Maintenance

Implementation. The CEQA process begins when an applicant applies for approval of a project that requires discretionary governmental approval (see flowchart on next page). If the project is not exempt from CEQA, the agency that has the authority to approve the project (the Lead Agency) must do a brief analysis of the environmental impacts of the project. This

evaluation is typically done with the preparation of an Initial Study. If this analysis reveals that the project will have no significant environmental impacts, then the Lead Agency can prepare a Negative Declaration. If the Initial Study reveals that the project may have significant environmental impacts, and all these impacts can be mitigated to a less than significant level, a Mitigated Negative Declaration can be prepared. If significant impacts can not be mitigated, the Lead Agency must issue a Notice of Preparation (NOP) and prepare an Environmental Impact Report (EIR). The EIR is a comprehensive analysis that includes a thorough discussion of environmental impacts, alternatives, and ways to mitigate the impacts.

CEQA Process Overview



Some projects are exempt from the CEQA process. Statutory exemptions include ministerial projects (i.e. building permits for projects meeting specified building criteria), projects undertaken due to an emergency, as well as specified projects (Public Resources Code, Section 21080 et seq.). Categorical exemptions apply to projects that the Secretary for Resources has found to have no significant effects on the environment, such as minor additions to existing schools (California Code of Regulations, Section 15300 et seq.).

NEPA requires all federal agencies, including the DoD, to prepare and report environmental impact assessments of any federal action before it is undertaken. The DoD implemented NEPA through a series of regulations such as Army Regulation 200-2. Another level of compliance was added on October 13, 1978 when President Carter signed Executive Order 12088. The Order subjects federal facilities (including military installations) to oversight by federal, state, and local environmental regulators. This order was further strengthened in 1992 with the passage of the Federal Facilities Compliance Act, which allows the EPA to inspect federal facilities to ensure environmental regulations are being met.

The NEPA process begins with the definition of the proposed action and a determination of whether this action qualifies for exclusion. If it does qualify, then a categorical exclusion (CATEX) is completed and a decision memo is published. If not excluded, an environmental assessment (EA) can be prepared, or the agency can decide to go straight to the preparation of an EIS.

If the EA finds that significant impacts may result, an EIS is prepared. If the EA determines that no significant effects will occur, a

Finding of No Significant Impact (FONSI) is completed and published.

Like an EIR, an EIS is a comprehensive analysis of potential significant impacts that includes a thorough discussion of alternatives and potential mitigations. Following completion of the public review of the draft EIS, a final EIS is prepared along with the Record of Decision (ROD).

There are many similarities between the NEPA and CEQA processes, and between an EIS and an EIR (see comparison chart on next page). For instance, the federal Notice of Intent (NOI) is analogous to the State NOP; the federal Notice of Availability performs the same function as the State Notice of Completion; both processes offer the opportunity for other agencies and the public to comment on the environmental document; and the required contents of an EIS are largely the same as those required of an EIR.

Nonetheless, there are also differences. For instance, EIS scoping and notice requirements are, understandably, oriented toward federal agencies and include state and local agencies and groups as necessary. CEQA requires public notice to be published in a local newspaper or otherwise provided locally. Under NEPA, the project and a range of alternatives to the project are examined at the same level of detail (i.e., the proposal is seen as one of several alternatives). CEQA does not require alternatives to be examined in as great a detail as the project (i.e., alternatives are means of avoiding the impacts associated with the project). NEPA requires, as part of the discussion of each alternative, discussion of mitigation measures and growth inducing impacts. CEQA requires a separate discussion of these issues, focusing on the project. NEPA does not require the agency to adopt the mitigation measures identified in an EIS. CEQA mandates adoption unless a measure is found to be infeasible for specific reasons.

EIR / EIS Comparison

EIR (CEQA)	EIS (NEPA)
Preparation of Project Description and environmental information form	Determination by Lead Agency that Permit Application is complete
Preparation of Initial Study	Preparation of Environmental Assessment
Decision to Prepare EIR	Decision to Prepare EIS
Notice of Preparation (NOP)	Notice of Intent (NOI)
Formal Scoping	Formal Scoping
Draft EIR	Draft EIS
Agency and Public Review Period (typically 45 days)	Agency and Public Review Period (typically 45 days)
Preparation of Responses to Comments and Final EIR	Preparation of Responses to Comments and Final EIS
Distribution of Final EIR	Distribution of Final EIS
Comments sent to commenting agencies 10 days before decision	Federal Register Notice Public Notice of Availability (NOA) of Final EIS,
Certification of EIR, Project Approval and Adoption of Mitigation Monitoring Program	--
Notice of Determination (NOD)	Record of Decision (ROD)
30-day Statute of Limitations	--

Source: Based on Figure 2 in *CEQA, NEPA and Base Closure: Recipes for Streamlining Environment Review* March 1996, CEQA Technical Advice Series, Office of Planning Research.

Maintenance. As a result of the CEQA or NEPA process, the proposed project could have been modified in order to reduce or avoid impacts or a set of mitigations measures could have been adopted. In either case, the planner will be responsible to ensure the modifications or mitigations are implemented with the project.

With some projects, changes in the project or conditions could change over time prior to the project being initiated. Both CEQA and NEPA have protocols to review projects and determine if additional or follow-on analysis is warranted.

Resources / References

- **The California Environmental Quality Act.** This site provides general reference materials and case law pertaining to the CEQA legislation.
<http://ceres.ca.gov/ceqa/>
- **The California Environmental Quality Act Guidelines.**
http://ceres.ca.gov/topic/env_law/ceqa/guidelines/
- **CEQAnet.** The State Clearinghouse maintains a searchable database of all environmental documents that it receives from public agencies. The database allows the public to view brief descriptions of these documents, and allows public agencies to electronically submit environmental notices to the State Clearinghouse.
<http://www.ceqanet.ca.gov/>
- **National Environmental Policy Act (NEPA) legislation.**
<http://ceq.eh.doe.gov/nepa/regs/nepa/nepaqia.htm>
- **U.S. Environmental Protection Agency (EPA), Compliance and Enforcement.** This site provides pertinent information resources on the NEPA process, case law, date, reports, statutes, and training.
<http://www.epa.gov/compliance/nepa/>

CEQA – Environmental Checklist Form (Appendix G)

A CEQA checklist is used to identify a proposed project's, potential environmental impacts. The following questions, excerpted from the State's standard CEQA checklist, are applicable to community/military compatibility, and ask if the proposed project would result in any of the following impacts.

XI. Noise

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

XII. Population and Housing

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

XIII. Public Services

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other Public Facilities?

XV. Transportation/Traffic

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

A complete CEQA checklist can be found at the following location:

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/Appendix_G.html

Primary responsibility: ■ Local □ Military

Definition

Cluster development is a type of subdivision where dwelling units are grouped together, or attached, with the purpose of retaining open space and reducing the impacts of development on the landscape and environment. Cluster development is also referred to as open space zoning, conservation zoning, conservation subdivision, or a type of density transfer. Cluster development may be implemented through the use of a Planned Unit Development (PUD).

Purpose

The purpose of cluster development is to provide for residential development on smaller lots than what is generally permitted under normal zoning requirements, which:

- Results in the permanent preservation of open space that would not normally be preserved under traditional development;
- Encourages creative site planning that is sensitive to the natural characteristics of the land without sacrificing existing, permitted densities;
- Provides for economical development, efficient provision of public services, and minimizes road and driveway construction and paving; and,
- Promotes aesthetics and other amenities.

The open space preserved through this clustering can be used to protect aviation resources (airspace) or provide buffers between military operational areas and community development.

Key Issues

- In many communities, conventional zoning and subdivision requirements can limit the application and use of cluster development. As such, developers must educate and convince local entities to approve variances for cluster

developments, potentially delaying a project.

- Cluster development is generally subject to more rigorous design review than traditional neighborhood design.

Roles and Responsibilities

Communities and military planners can work together to identify areas where additional land buffers or open space may be beneficial to both the community and military installations.

Community Planner's Role. If a community decides to create a cluster development policy, community planners should work with local elected officials, community members, and landowners to adopt flexible development techniques and zoning codes that allow for this type of development. Once established, community planners are responsible for ensuring that development occurs according to local planning policy.

Military Planner's Role. Information pertaining to military training routes and other activities that could impact the general public can be provided, as appropriate, with neighboring jurisdictions (i.e., type and timing of potential impacts). This information assists in the determination of appropriate areas for cluster development and the preservation of open space.

Implementation and Maintenance

Implementation. Clustered development is usually implemented by local governments through their general plans, zoning and subdivision ordinances. Cluster developments may be allowed by right or require a special permit, depending on the community's adopted policies. In designing and modifying cluster development provisions, the following should be taken into account:

- Offer incentives. Density bonuses are commonly used incentives that

communities can offer to encourage cluster development; and,

- **Preserve Intended Lands.** It is important than cluster development provisions result in the preservation of meaningful areas. Generally, this means open space with conservation value, areas with high accident potential, historically significant areas, recreational areas, and other areas of significance. If cluster development provisions do not explicitly state the areas of intended preservation, then development could actually occur on valuable resource areas while preserving less valuable open space.

Maintenance. Ordinances should be reviewed and revised as determined necessary to meet community objectives and obtain consistency with the adopted General Plan. At a minimum, evaluation of the community's cluster development policies should occur on a bi-yearly basis.

To ensure open space is properly managed, review and approval authority over these management plans should be retained by the community. Neighboring military installations could be involved in the management process through the establishment of a formal agreement (such as a Memorandum of Understanding) or informal agreement between the parties involved.

Resources / References

- **Smart Growth Online.** The Smart Growth Network is building a library of resources to assist in educating and informing communities on various smart growth techniques, including cluster development
<http://www.smartgrowth.org>
- **American Planning Association (APA).**
<http://www.planning.org>
- Randall, Arendt. *Rural by Design* (Chicago Planners Press/APA, 1999).
- Also refer to this related Handbook tool: (11) Conservation Easement.

Primary responsibility: ■ Local □ Military

Definition

Code enforcement attempts to ensure that property owners maintain their property and bring substandard structures and conditions up to Building and Zoning Code standards. Code enforcement programs are responsible for enforcing codes that address public health and safety issues, including regulations related to garbage, specific nuisances, removal of vegetation, zoning violations, and structures. Enforcement actions are taken both proactively and in response to complaints from residents.

Purpose

The purpose of code enforcement programs is to promote and maintain a safe and desirable living and working environment. Related to land use compatibility, code enforcement is a tool used by the community to ensure its rules are enforced. Issues could arise relative to structure heights, light and glare, and fire hazards.

Key Issues

Code enforcement programs can be targeted at specific types of issues. For instance, efforts can be made to control sources of glare, dust generators, or vertical encroachments. While more effective than responding to complaints, these focused efforts can be expensive to initiate and maintain.

Roles and Responsibilities

Community Planner's Role. As local entities are the primary implementers of code enforcement programs, community planners play a vital role in protecting the integrity of city codes and ordinances. Planners may either be directly involved in day-to-day code enforcement or indirectly involved through the provision of assistance to code enforcement officers.

Military Planner's Role. Military planners are not directly involved in the implementation of local code enforcement programs. However, military planners can assist in code enforcement by notifying neighboring jurisdictions of potential code violations that may impact the installations ability to conduct its mission or training activities.

Implementation and Maintenance

Implementation. Code enforcement officers and building inspectors should educate local developers and residents on code compliance regulations, methods, and technologies as needed. In regards to land use compatibility with military installations, codes addressing the following areas are especially relevant:

- Excessive garbage or other activities that would attract birds or other animals potentially hazardous to military operations;
- Presence of incompatible land uses as per the Zoning Code;
- Excessive vegetation or construction of structures exceeding acceptable height standards; and,
- Light producing sources above acceptable limits for night navigation or military operations.

Maintenance. Code enforcement programs should be routinely evaluated for effectiveness. Goals should be reassessed to determine if current activities are sufficiently prioritized.

Resources/References

- **California Association of Code Enforcement (CACE).**
<http://www.cace1.org>
- **American Association of Code Enforcement.**
<http://www.aace1.com>

- **Statewide California Association of Code Enforcement Officials, Inc. (SCACEO).**
<http://www.scaceo.org>
- **International Code Council (ICC).**
<http://iccsafe.org>

Primary responsibility: ■ Local □ Military

Definition

Conditional Use Permits (CUP) and Special Use Permits (SUP) are discretionary development permits that allow local jurisdictions to evaluate and put conditions on uses that might have an undesirable effect on the area if not conditioned.

Purpose

Some types of land uses are only allowed upon approval of a CUP also called a special use permit. CUPs are issued after a public hearing. Uses that might require a CUP include community facilities (i.e., hospitals or schools), public buildings or grounds (i.e., fire stations or parks), temporary or hard-to-classify uses (i.e., Christmas tree sales), or uses with potentially significant environmental impacts (i.e., hazardous chemical storage or surface mining). The local zoning ordinance specifies the uses for which a conditional use permit is required, the zones they may be allowed in, and the public hearing procedure. When allowing a project, the CUP will impose special development requirements to insure that the use will not be detrimental to its surroundings. Requirements might include additional landscaping, soundproofing, limited hours of operation, additional parking, or road improvements. A CUP does not rezone the land.

In the case of land use compatibility issues, the CUP could ensure a project is conditioned to avoid degrading the ability of nearby military installations to conduct training or mission critical activities.

Key Issues

- CUPs do not authorize uses prohibited by the zoning ordinance.
- The conditions imposed on a CUP must be expressly attached to the permit and cannot be implied.

Roles and Responsibilities

Community Planner's Role. Community planners play an active role in the use of conditional and special use permits as these permits are primarily implemented by local planning departments. In addition to the land entitlement process, planners should educate the public and local developers on the use and procedures of CUPs.

Military Planner's Role. Military planners can work with local entities to determine the applicability of CUPs to help set conditions needed to protect military operations. For example, one area of consideration may involve commonly used flight paths for military aircraft. Community and military planners can work jointly to discuss the potential for conditional approval of land uses, use of lighting or radio frequencies, and structural height, all of which could impact air traffic if not conditioned properly.

Implementation and Maintenance

Implementation. Following submittal of a complete application, the local planning department will process the application. Primary activities include the development of conditions necessary to ensure the compatibility of a proposed use with surrounding land uses and the proposed site. Review of the application and development of conditions can be done in coordination with the appropriate military planners to ensure impacts to military facilities or operations are minimized.

The approval of a conditional use permit is typically acted on by a Planning Commission.

Maintenance. Projects approved under a CUP or SUP should be monitored for compliance with the attached permit conditions.

Resources / References

- **California Permit Handbook**, (California Office of Permit Assistance), 1996-97. A guide to the State permit process and provides guidance for complying with the State's environmental quality and permit streamlining statutes, regulations, and policies.
- Fulton, William. **Guide to California Planning**, (Solano Press Books), October 1999 (2nd edition). A guide to land use planning as practiced in California. It describes common language, the general plan, zoning, subdivisions, annexation and incorporation, and CEQA.
- **Office of Planning Research (OPR)**. The OPR Planner's Training Series includes a section on the Conditional Use Permit.
<http://ceres.ca.gov/planning/cup/condition.htm>

Primary responsibility: ■ Local ■ Military

Definition

A conservation easement is a legally recorded agreement by which landowners may voluntarily restrict specific uses of their land. Conservation easements can assist in retaining land predominantly in its natural, scenic, historical, agricultural, or open-space condition.

Purpose

A conservation easement is a way to protect the resource, open space, or agricultural value of land by keeping it in its current state. The owner maintains ownership of the property and the right to sell or deed the property to another. The owner also keeps the right to use the property for economic gain or recreation as long as the use is allowed by the conditions of the easement. A donation of a conservation easement can reduce estate, income, and property taxes for the owners.

Conservation easements provide a legal mechanism to implement purchase of development rights (PDR) and transfer of development rights (TDR) programs. The purpose of these programs is to use market forces to simultaneously promote conservation in designated areas, while encouraging smart growth in developed and developing areas.

PDR programs are voluntary legal agreements that allow owners with a vested development right to sell the right to develop their property to state and local governments and nonprofit organizations. The development rights associated with a parcel of land can be individually purchased from the bundle of rights that go with the land which include the right to possess, use, develop, lease, or sell the land. This agreement is recorded on the land title and permanently limits the future use of the land as stated by the PDR agreement.

TDR, sometimes referred to as a transfer of development credits, relocates potential

development from areas where proposed land use or environmental impacts are considered undesirable (the donor site) to another area (the receiver site) chosen on the basis of its ability to accommodate additional development, with minimal environmental, social, and aesthetic impacts.

From a land use compatibility perspective, conservation easements provide a mechanism to maintain land in its current undeveloped state while providing benefits to the property owner.

Key Issues

- Donating an easement is not always a financially viable option for landowners.
- Monitoring and enforcing conservation easements requires a serious commitment on the part of the easement holder.
- Conservation easements do not offer protection from eminent domain. If land under easement is taken through eminent domain, both the landowner and the easement holder must be compensated.
- The implementation of PDR and TDR programs can be complex and administratively challenging, requiring the local government to make a strong commitment to administering the program and educating residents and developers on its use.

Roles and Responsibilities

A conservation easement is a voluntary land protection tool. When several individuals own a property, all owners must agree to place the easement. If the property is mortgaged, the mortgage holder must also agree to place the easement.

A conservation easement is designed to protect a property according to the owner's wishes. Since the easement is generally granted in perpetuity, it is necessary for an outside party to be responsible for monitoring and maintaining the

easement. The outside party holds the easement and is required to monitor and enforce the adherence of current and future property owners to the terms of the easement.

Easements are usually held by local government agencies, land trusts, or other nonprofit organizations designed for this purpose. Since personnel are needed to monitor and maintain easements in perpetuity, easement donors often are required to provide financial support for the easement if it is held by a nonprofit organization. Designating both a government agency and a nonprofit or land trust as co-holders of the easement is an alternative selected by many landowners. Such an arrangement may be required by certain public programs wherein the easements are purchased by a government preservation program or organization. This responsibility generally includes:

- Establishing baseline documentation for the easement. This process involves ensuring that the language of the easement is clear and enforceable, developing maps and property descriptions, and recording the property's characteristics.
- Providing information and background data regarding the easement to new or prospective property owners.
- Establishing a review and approval process for the allowable land activities stipulated in the easement.
- Enforcing the restrictions of the easement through the legal system, if necessary.
- Maintaining property and easement-related records.

Community and military planners can work together to identify and prioritize areas where conservation easements would be beneficial to one or both entities. Once prioritized, strategies can be implemented to encourage or require the use of conservation easements.

Implementation and Maintenance

Implementation. Conservation easements are implemented through a conservation easement document that contains a series of restrictions on the use of the land. The owner transfers, by deed of conservation easement to a public agency or nonprofit organization, certain rights that will restrict land uses on the property in the future.

An easement may be granted for a term of years or in perpetuity. However, in order for a landowner to take advantage of the tax benefits of a donated easement, it must be given in perpetuity.

Maintenance. Conservation easements should be periodically reviewed to ensure the terms of the easements are being met. In addition, monitoring the use of the land should occur on a regular basis. This task may require personal visits to the property to ensure that easement restrictions are being upheld.

Resources/References

- **American Farmland Trust.** This group works to maintain farmland resources within the United States using a variety of conservation techniques.
(<http://www.farmland.org>)
- **Land Trust Alliance.** The Land Trust Alliance promotes voluntary private land conservation to benefit communities and natural systems. Resources and training on land trusts and conservation techniques are available, in addition to available grant opportunities.
(<http://www.lta.org>)
- **Trust for Public Land.** The Trust for Public Land (TPL) is a national, nonprofit, land conservation organization that conserves land for people to enjoy as parks, community gardens, historic sites, rural lands, and other natural places, ensuring livable communities for generations to come. This organization provides information on available federal

and state programs pertaining to conservation and offers services and assistance in conservation transactions, finance, and direction (visioning).

(<http://www.tpl.org/>)

- **National Park Service (NPS).**

The NPS is the federal government's primary agency for the preservation of America's parks and conservation of natural resources.

<http://www.nps.gov>

- **The Conservation Fund.**

<http://www.conservationfund.org>

- **The Nature Conservancy.** The Nature Conservancy's mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. This organization provides information on resources available for the conservation and protection of sensitive lands.

<http://www.nature.org>

- Byers, Elizabeth and Marchetti Ponte. ***The Conservation Easement Handbook***.

Land Trust Alliance and the Trust for Public Land, 2005. This book provides substantial information on conservation easements and land trusts including the process for creating an easement, developing a stewardship program, and drafting a conservation easement.

- **Smart Communities Network.** This Internet site provides a wide variety of information on sustainable land use techniques, green buildings and development, and other sustainable development methods.

<http://www.sustainable.doe.gov>

- **American Planning Association (APA).** APA is a nonprofit public interest and research organization committed to urban, suburban, regional, and rural planning. APA and its professional institute, the American Institute of Certified Planners, advance the art and

science of planning to meet the needs of people and society.

<http://www.planning.org>

- **Smart Growth Online.** The Smart Growth Network is building a library of resources to assist in educating and informing communities on various smart growth techniques.

<http://www.smartgrowth.org>

- **Sierra Business Council**

<http://www.sbcouncil.org>

- **League of Cities' Institute for Local Self Government.** The League of Cities' published an "Open Space Funding Guide" that describes the use of conservation easements.

<http://www.ilsg.org>

- Also refer to these related Handbook tools: (1) Acquisition, (5) Avigation Easement, (12) Conservation Partnering Authority, and (14) Deed Restrictions.

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

A conservation partnering authority is a land acquisition authority specifically created to address land use compatibility challenges. In conjunction with other land acquisition tools, conservation partnering authorities can be used to reduce or eliminate current or potential land use compatibility issues that are likely to restrict military operations.

The Fiscal Year 2003 Defense Authorization Act (Title 10 U.S. Code 2684a) authorized military agencies to enter into “encroachment partnering” agreements with states, local jurisdictions, and private conservation entities. Private conservators who specialize in identifying and acquiring private land for conservation purposes can be used to speed up the acquisition process.

Purpose

The purpose of a conservation partnering authority is to establish and execute agreements with public and private partners to acquire real property interests from willing sellers adjacent to or near military installations. The acquisition of property allows it to remain in an undeveloped state under control of the authority, thereby reducing incompatible land use issues. It also preserves off-installation habitat to relieve current or avoid future environmental restrictions on operations.

Key Issues

- Local governments should be involved in the strategy for land acquisition to avoid planning for infrastructure and services to an area that will remain undeveloped. Land acquisition can also impact economic development potential in an adjacent community.

Roles and Responsibilities

Community and Military Planner’s Role.

Local and military planners should jointly determine which conservation organizations, as well as government agencies, are interested in partnering for land acquisition. In addition, all interested and affected parties should work cooperatively to determine areas for conservation meeting the needs of both the local community and the military. Both military agencies and public entities should be willing to initiate contact with conservation agencies. A potential method to acquire conservation partners is to issue a request for proposals (RFP) for a partner.

Implementation and Maintenance

Implementation. The formal establishment of conservation partnerships often occurs when interested parties initiate contact with landowners within areas designated for conservation. Once willing landowners for conservation agreements are identified, funds for the purchase of development rights must be obtained. This is where the military or local governments can be active participants in the partnerships as available funding resources for cost sharing can be brought to the table.

Maintenance. Conservation partnerships should be maintained through continual communication between all members. All entities involved in the partnership should be willing to exchange information and discuss conservation priorities and methods. These ongoing discussions should include local communities for the reasons stated under Key Issues.

Resources / References

- **Army Compatible Use Buffer Program.**
<http://www.sustainability.army.mil/acub.htm>
- **Navy Encroachment Partnering (EP)** program.
- **Navy Encroachment Management** program.
- **Chief of Navel Operations Instruction, Encroachment Management,** OPNAVINST 11010.40
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV Directives links)
-

Also refer to these related Handbook tools: (1) Acquisition (including funding sources), (5) Avigation Easement, (11) Conservation Easement, and (14) Deed Restrictions.

Army Compatible Use Buffer (ACUB)

In response to the congressional expansion of the Private Land Initiative, the Army created the Army Compatible Use Buffer (ACUB) Program to implement conservation partnering. ACUBs are formal agreements between the U.S. Army and eligible entities for the acquisition of land, or interest in land or water rights, from willing sellers. This program allows for the Army to enter into partnerships with state, county, or municipal governments, as well as non-profit organizations, to purchase tracts of land or create easements on lands that surround Army installations using federal funds.

The primary purpose of ACUBs is to provide a natural buffer for perpetuity between military training lands and community activities. This accomplishes several goals including limiting the effects of urban and suburban encroachment on Army installations and training areas, maintaining the Army's ability to use and access current training ranges within the installation boundary, meeting Endangered Species Act recovery responsibilities, and preventing future threatened and endangered species listings in military areas.

As of August 2005, ACUB partnership agreements are currently in place at Camp Riley, MN; Camp Blanding, FL; Fort Carson, CO; U.S. Army Garrison, HI; Fort Sill, OK; Fort Stewart, GA; Fort Bragg, NC; and Fort A.P. Hill, VA.

Additional information on ACUB programs can be obtained at the following locations:

- US Army Sustainability, Army Compatible Use Buffers (ACUBs) Internet Site.
<http://www.sustainability.army.mil/acub>
- US Army Environmental Center (USAEC).
<http://aec.army.mil/usaec/>

Primary responsibility: ■ Local □ Military

Definition

Construction standards and building codes are ordinances and regulations controlling the design, construction process, materials, alteration, and occupancy of any structure to insure human safety and welfare. They include both technical and functional standards and generally address the following.

- **Structural Safety.** Buildings should be strong enough to resist internally and externally applied forces without collapsing.
- **Fire Safety.** Includes requirements to prevent fire from spreading to and from neighboring structures, provide warning to occupants, provide for safe exit routes from the building, and provide access for fire suppression.
- **Health Requirements.** Provides for adequate plumbing and sanitation facilities for occupation of a structure.
- **Accessibility.** Requires a building to be accessible for persons in wheelchairs or having other disabilities.

Purpose

Construction standards and building codes are designed to protect the health, safety, and welfare of citizens.

Key Issues

- Building and construction codes are not intended to limit the appropriate use of materials, appliances, equipment or methods of design or construction not specifically prescribed by the code, as long as the proposed alternatives are determined by the local building official to be at least equivalent to the prescribed code.

- Construction standards and building codes often vary by state, county, city, and/or town.

Roles and Responsibilities

Community Planner's Role. Community planners should work closely with local building officials to determine areas in proximity to military installations necessitating special building standards, such as incorporation of sound attenuation techniques.

Military Planner's Role. Military personnel can assist local entities by reviewing development in areas impacted by military operations and determining the degree of impact. This assistance would provide local entities the knowledge needed to adopt and enforce building standards as appropriate.

Implementation and Maintenance

Implementation. Implementation of construction standards and building codes are the responsibility of local governments.

Maintenance. Building codes and construction standards should be reviewed and updated as needed. Community planners can work cooperatively with military planners to ensure any change in installation activities are appropriately addressed in local construction and building codes.

Resources/References

- **International Code Council (ICC).**
<http://www.iccsafe.org>
- **National Association of Homebuilders (NAHB)**
<http://www.nahb.org>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

Deed restrictions, or covenants, are written agreements that restrict or limit some of the rights associated with property ownership. These restrictions are recorded with the deed for the property and stay with the property when it is sold to a new owner (i.e., remain in effect). Deed restrictions are private agreements or contracts between an interested buyer and a seller. Deed restrictions are often established by the initial subdivider, either voluntarily or as a condition of approval on the subdivision.

Purpose

Deed restrictions can cover a wide range of restrictions and can be tailored to meet specific needs. Deed restrictions can also be used to eliminate or mitigate impacts associated with local development on military installations. This is done through the incorporation of restrictions or limitations on development types or certain land uses. For instance, specifying a maximum height for trees and structures, restricting the use of motorized vehicles, limiting lighting, and so forth.

Key Issues

- Deed restrictions offer no tax benefits.
- Some restrictions can be obtained during property entitlements as a condition of approval or as environmental mitigation.
- Deed restrictions are often used for specific restrictions such as height limitations.

Roles and Responsibilities

Community Planner's Role. Local planners should work with installation planners and resource managers to identify those areas where deed restrictions would be beneficial in mitigating the effects of land use conflicts. Within these areas, the community could require new developments to include deed restrictions favorable to the continued operation of military installations.

Military Planner's Role. Military planners can assist in the identification of areas in adjacent communities or unincorporated areas where deed restrictions would benefit the installation's ability to conduct its mission and would protect public health and safety. Military agencies can utilize available resources, such as a DoD Conservation Partnering Authority, that authorizes the military to enter into agreements with eligible entities to acquire real estate interests near military installations.

Implementation and Maintenance

Implementation. Deed restrictions are usually created and imposed on lots at the time of subdivision or during development review. At that time, the restrictions are filed in the Deed Records of the County Clerk before the developer sells any lots in the subdivision. Deed restrictions can also be voluntary dedicated or purchased by the military in cooperation with non-profit organizations. Deed restrictions will typically include a variety of information including the following:

- Legal description of the restricted property and parties involved;
- Identification of the property covered by the restrictions;
- Purpose and description of the restrictions placed on property use;

- Duration of the restrictions, their renewal and maintenance, enforcement and application; and,
- Signatures of the parties entering into the agreements.

Maintenance. The length of time deed restrictions remain in effect is determined by: 1) the specific timeline laid out in the documents creating the deed restrictions, and 2) whether the deed restrictions have been enforced and maintained. While some deed restrictions have specific life spans, most are drafted to remain in effect “in perpetuity” (forever) by a series of automatic renewals.

Resources / References

- Most local planning departments can provide sample deed restriction requirements made as a part of a subdivision approval.
- Also refer to these related Handbook tools: (1) Acquisition, (5) Avigation Easement, (11) Conservation Easements, and (12) Conservation Partnering Authority.

Primary responsibility: ■ Local □ Military

Definition

Every city and county in California is required by state law to prepare and maintain a policy document called a general plan. General plans are designed to serve as the jurisdiction's blueprint for future decisions concerning physical development, including land use, infrastructure, public services, and resource conservation. Most general plans consist of: (1) a written text discussing the community's goals, objectives, policies, and programs for the distribution of land use; and, (2) one or more diagrams or maps illustrating the general location of existing and future land uses. All specific plans, subdivisions, public works projects, and zoning decisions made by the local government must be consistent with the general plan.

A general plan typically has three defining features:

- **General.** As the name implies, a general plan provides general policy guidance that will direct community land use and resource decisions.
- **Comprehensive.** A general plan covers a wide range of social, economic, infrastructure, and natural resource factors as they relate to land use and development. These include topics such as land use, housing, circulation, utilities, public services, recreation, agriculture, biological resources, noise, safety, and other issues that are relevant to the jurisdiction.
- **Long-range.** General plans provide guidance on reaching an envisioned future. To fulfill this vision, the general plan will include policies and actions that address both immediate and long-term needs. Most general plans look 20 years into the future.

Purpose

The primary purposes of a general plan are to:

- Identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to future development in the community;
- Provide a basis for local government decision making, including decisions on development approvals;
- Provide citizens with opportunities to participate in the planning and decision making processes of their communities; and,
- Inform citizens, developers, decision makers, and other cities and counties of the policies that guide development within a particular community.

Key Issues

- The state mandates that each general plan cover a set of specific topics, but the issues that need to be addressed under these topic areas will vary from community to community. An issues and opportunities evaluation, based on input from the public and local decision makers, is a typical precursor to the development of a general plan.
- During the adoption or update of a general plan, the city or county must allow public involvement. Military services with facilities or operations within the area included in the jurisdiction's general plan should work with local planners to be actively involved. Government Code, Section 65352(a) requires that general plan revisions or amendments are referred to the military prior to adoption, under certain circumstances.
- During a general plan update, a range of land use and policy alternatives are typically developed. Military planners should be involved early in this phase to

ensure that compatibility issues are understood in the development of alternatives.

Roles and Responsibilities

Community Planner's Role. Local planners are actively engaged in all aspects of general plan development. The complexity of issues involved in developing a general plan may require a community to hire consultants to assist the local agency planning staff. Local planners, or their consultant team, should consult with the military early in the general plan process to thoroughly understand the military's mission, the potential or existence of impacts from military operations on the community, and the impact of the local community on military installation and activities. In addition to consultation, local governments may consider inviting military representatives to serve on general plan steering or technical committees.

Once the draft plan is prepared, the community planner needs to circulate the general plan revision or amendment to the military prior to adoption, as specified in Government Code, Section 65352(a).

Military Planner's Role. Military planners can assist by being engaged and participating in the preparation of general plans that affect the military mission. Providing the following information would assist local governments in compatibility planning.

- Location of existing and proposed military aviation routes.
- Military housing needs that cannot be met by on-base facilities.
- Existing land use compatibility issues.
- Training and other vital installation areas potentially impacted by adjacent community development.
- Conservation areas and natural habitats within the installation or adjacent to the installation that could be impacted by neighboring development.

- Primary transportation corridors used by the military within the planning area.
- Safety considerations applicable to off-installation areas related to military facilities or operations.

Implementation and Maintenance

Implementation. The adopted general plan becomes the basis for all future local government decisions about growth and development. Communities enforce the general plan through the approval or denial of development and infrastructure projects based on their consistency with the general plan policies and objectives. These policies and objectives are implemented through tools such as the zoning ordinance, specific plans, subdivision ordinances, capital improvement plans, growth management ordinances and policies, building codes, and other such codes and regulations.

Senate Bill (SB) 1468 (Knight, Chapter 971, Statutes of 2002) requires that general plans address military compatibility issues when military facilities, installations, or operations are near to, or within, the jurisdiction. This is codified in the California Government Code, Sections 65302 and 65560. Appendix B contains examples of how general plan policies might be crafted to satisfy the requirements of state planning law.

The following is an overview of the seven elements that must be covered in a general plan.

- **Land Use.** This element covers the description of land use types, the general location and extent of proposed land uses, and standards of population density and building intensity. It also provides a map of existing and future land uses.

The land use element must consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas.

- **Circulation.** The Circulation Element provides guidance on the movement of people and goods. This includes planning for roads, transit, boating, bicycles, and pedestrians and their interconnections. The circulation element must address military airports, ports, and installations in the community and correlate these facilities with the land use element of the plan.
- **Housing.** The Housing Element contains goals, policies, implementation measures, and quantified objectives to facilitate the development of housing for all economic sectors of the community. The housing element strives to achieve a balanced mix of housing opportunities and should consider the housing needs of military installations.
- **Conservation.** This element discusses a community's plan for the conservation, development, and use of natural resources such as water, forests, soils, fisheries, and mineral deposits .

The conservation element must consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands, including military installations.

- **Open Space.** This element discusses the plans and actions for preserving open space for natural resources; agriculture; outdoor recreation, and public health and safety. Open space land is defined to include areas adjacent to military installations, military training routes, and restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands.
- **Noise.** The noise element addresses all types of noise generating land uses, including transportation-related noise (roadway, rail, and air) and industrial and commercial noise sources.

The noise element should address noise generated by military airport operations, aircraft overflights, jet engine test stands, ground facilities and maintenance functions related to airport operation, and other ground stationary noise sources from military installations that have off-installation impacts.

- **Safety.** This element establishes policies to protect the community from unreasonable risks associated with floods, fire, and seismic/geologic hazards. The element also includes a diagram of known geologic hazards.

The Safety Element of the general plan should address public safety impacts associated with military installations, airports, training areas, and activities adjacent to the community.

In each county where an airport land use commission does not exist, but where there is a military airport, the general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the safety and noise standards in the Air Installation Compatible Use Zone (AICUZ) prepared for that military airport.

Although not required by law, cities and counties may elect to adopt a separate military element as a component of the general plan. This element could consider the impact of new growth on military readiness activities carried out on military bases, installations and operating and training areas, on property adjacent to the military facilities and underlying designation military aviation routes and airspace. It could also address any other policies a community may have regarding military installations and activities.

Maintenance. Every city and county has a responsibility to keep the general plan current. Typically, general plans are updated every five to ten years or when the area has a major change

that needs to be updated in the plan. Each mandatory element of the general plan can be amended up to four times a year. However, this limitation does not apply to the following situations.

- Optional elements, such as a military element.
- Amendments requested and necessary for the provision of affordable housing (Government Code, Section 65358(c)).
- Any amendment necessary to comply with a court decision in a case involving the legal adequacy of the general plan (Government Code, Section 65358(d)(1)).
- Amendments after January 1, 1984, to bring a general plan into compliance with an airport land use plan (Government Code, Section 65302.3).
- Amendments needed in connection with the adoption of a comprehensive development plan under the Urban Development Incentive Act (Health and Safety Code, Section 56032(d)).
- Any amendments for the purpose of developing a certified Local Coastal Program (Public Resources Code, Section 30500(b)).

Resources / References

- **State of California, General Plan Guidelines 2003.** Governor's Office of Planning and Research (OPR). <http://www.opr.ca.gov/publications/>
- Fulton, William. **Guide to California Planning**, (Solano Press Books), October 1999 (2nd edition). A guide to land use planning in California.
- **California Land Use Planning Information Network (LUPIN).** Includes sources for adopted county and city general plans in California. <http://ceres.ca.gov/planning/plans/>

Primary responsibility: ■ Local □ Military

Definition

The California Natural Community Conservation Planning Act and the Federal Endangered Species Act allow for the development of Natural Community Conservation Plans (NCCPs) and Habitat Conservation Plans (HCPs). An NCCP identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

Incidental take permits help landowners legally proceed with activities that might otherwise result in illegal impacts to a listed species. A HCP is a document that supports an incidental take permit application pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act. HCPs are an evolving tool. Initially designed to address individual projects, HCP are currently more likely to be broad-based plans covering a large area. The geographically broader HCP is used as the basis for an incidental take permit for any project within the boundaries of the HCP. Regardless of size, a HCP should include measures that, when implemented, minimize and mitigate impacts to the designated species to the maximum extent possible, and the means by which these efforts will be funded.

Purpose

The primary objective of the NCCP and HCP programs is to conserve natural communities at the ecosystem level while accommodating compatible land use. The programs seek to anticipate and prevent the controversies and gridlock that can be caused by species' listings. Instead, they focus on the long-term stability of wildlife and plant communities. The programs also include key stakeholders in the development process for the plan.

Key Issues

- One of the most difficult issues for the preservation of natural habitats is

funding. Habitat acquisition in fast-urbanizing areas can be expensive.

- The success of the habitat conservation planning process largely depends on the success of the process. These tools require a collaborative, stakeholder driven process requiring a broad consensus to ensure program success.
- Different areas are encouraged to develop their own approaches to conservation planning while maintaining close communication with state and federal agencies to ensure that any NCCP or HCP is consistent with established conservation standards.

Roles and Responsibilities

Community Planners. There are many incentives for local governments to participate in the NCCP and HCP processes. These incentives include:

- Greater predictability and control for land development in their jurisdictions. Local governments with approved plans can receive permits for the incidental take of species covered by the plans; and,
- The benefits associated with regional open space planning. The NCCP and HCP processes can assist communities to assemble biodiversity reserves that provide open space, aesthetic, and recreational benefits.

Local governments have several integral responsibilities during the development and implementation of the NCCP and HCP. These responsibilities include:

- Initiating the planning process;
- Applying for any necessary grant monies to fund the planning process;
- Supplying necessary background data;
- Fostering a collaborative planning process;
- Developing effective stakeholder work groups;

- Funding land acquisition;
- Monitoring and management of reserve lands; and,
- Adopting and enforcing local land use regulations. These include requirements for developers to set aside open space and to avoid and mitigate development impacts.

Military Planners. Representatives from the military can actively participate in the NCCP and HCP process as a designated member of a working committee or project steering group. In addition, any environmental data or other information compiled by the military can be shared with the project team to ensure biological communities within installation boundaries are included in the plan.

Implementation and Maintenance

Implementation. Typically, the preparation of NCCPs and HCPs follow a similar process. One of the first steps is the formation of a steering committee with representation from landowners and developers, the environmental community, government representatives (local, state, and federal), and other affected stakeholders. Frequently, consultants are hired to prepare background biological and land use studies, the NCCP and HCP plan documentation, and any other accompanying environmental studies and data needed. The content of these plans vary substantially depending on the species studied and potential threats, but most create habitat preserves through land acquisition or dedication.

Most of the deliberation surrounding the development of a habitat conservation plan centers on the delineation and configuration of the proposed reserves, the funding available to finance the plan, and the determination of which entities or organizations will have management responsibilities to manage the habitat once it is obtained.

Basic Tenets of Reserve Design

1. Conserve target species throughout the planning area.
2. Larger reserves are better.
3. Keep reserve areas close to each other.
4. Keep habitat contiguous.
5. Link reserves with corridors.
6. Reserves should be diverse.
7. Protect reserves from urban impacts.

(NCCP Scientific Review Panel)

Maintenance. The NCCP and HCP plans determine the monitoring needed to ensure the plan is implemented. The monitoring plan varies based on the specifics of each species or the environmental threats. Monitoring plans can include the following components:

- Habitat monitoring, such as measuring trends in vegetation cover over time to detect declines in habitat quality.
- Corridor monitoring, such as assessing how well animals are able to traverse the linkages between habitat reserves.
- Monitoring for species covered by the plan, such as monitoring population trends for those plant species most susceptible to population declines or threats.
- Animal species monitoring, this includes focusing on indicators of ecosystem function, as well as those of special concern to regulatory agencies, to detect changes in population levels.
- Land acquisition.

Resources / References

- **California Department of Fish and Game (DFG), Natural Community Conservation Planning.** The DFG site provides information on the NCCP program, habitat conservation, and available grants.
<http://www.dfg.ca.gov/nccp/index.html>
- **U.S. Fish and Wildlife Service (FWS).** The U.S. FWS internet site provides vast information on the HCP program including access to the *Habitat Conservation Handbook*, recent HCPs, and grant information.
<http://www.fws.gov/endangered/hcp/index.html>
- **National Audubon Society.** *A Citizen's Guide to Habitat Conservation Plans.*
<http://www.audubon.org/campaign/esa/hcp-guide.html>
- **Beatley, Timothy.** *Habitat Conservation Plans: A New Tool to Resolve Land Use Conflicts.*
<http://www.lincolnst.edu/pubs/pub-detail.asp?id=539>

Habitat Conservation Funding Opportunities

■ **Federal**

- **Habitat Conservation Planning Grants.** Section 6 of the Endangered Species Act offers grant opportunities for incidental take permit applicants to plan and develop an HCP. (<http://www.fws.gov/endangered/grants/index.html>)
- **Habitat Conservation Plan Land Acquisition Grants.** Section 6 of the Endangered Species Act provides grant opportunities to incidental take permit holders to expand their conservation efforts by adding more area to their conserved lands. (<http://www.fws.gov/endangered/grants/index.html>)
- **Recovery Land Acquisition Grants.** Section 6 of the Endangered Species Act provides grant opportunities to purchase lands and conservation easements that promote the recovery of federally listed species. (<http://www.fws.gov/endangered/grants/index.html>)

■ **State**

- **California Department of Fish and Game (DFG).** The DFG offers grants to public and non-profit entities for urgent tasks associated with implementation of approved NCCPs, or NCCPs anticipated to be approved within 12 months of a grant application submittal.

Additional Habitat Conservation Tools

- **Safe Harbor Agreements.** A Safe Harbor Agreement is a voluntary agreement between the U.S. Fish and Wildlife Service and cooperating non-Federal landowners. Under such an agreement, a landowner is encouraged to maintain and/or modify habitat in order to attract endangered or threatened species to his or her property.
- **Candidate Conservation Agreements.** Candidate Conservation Agreements are voluntary agreements between the U.S. Fish and Wildlife Service and one or more parties to address the conservation needs of proposed or candidate species, or species likely to become candidates, before they become listed as endangered or threatened.
- **Conservation Banking.** Conservation banks are permanently protected privately or publicly owned lands that are managed for endangered, threatened, and at-risk species. A conservation bank is similar to a biological bank account. Instead of money, the bank owner has habitat or species credits to sell to other landowners or entities in need of a mitigation tool.

Primary responsibility: ■ Local □ Military

Definition

Hazard Mitigation is defined as any sustained, cost-effective action taken to reduce or eliminate long-term risk to people, property, and the environment from natural and man-made hazards and their effects. Hazard Mitigation Plans include actions that have a positive impact over an extended period of time. This distinguishes them from emergency planning or emergency services, which are associated with preparedness for immediate response to, and short-term recovery from, a specific event. Hazard mitigation actions, which can be used to eliminate or minimize the risk to life and property, fall into three categories: (1) those that keep the hazard away from people, property, and structures; (2) those that keep people, property, and structures away from the hazard; and (3) those that reduce the impact of the hazard, such as property insurance.

Purpose

The primary purpose of a hazard mitigation plan is to reduce fatalities, injuries, and property damage resulting from natural and man-made hazards. The hazard mitigation plan provides guidance for hazard mitigation activities in the designated planning area. It identifies hazard mitigation goals, objectives, and recommended actions that will reduce or prevent injury and damage to people and property from natural and man-made hazards.

For land use compatibility planning, hazard mitigation planning applies when the actions of one group increase the hazard potential for another group. For example, when development outside an installation increases flood risk on an installation or when a natural area on an installation becomes a wildfire hazard to a nearby community due to poor management.

Key Issues

- Hazard mitigation plans should not be confused with emergency management plans. Mitigation and preparedness are the primary purposes of a hazard mitigation plan.
- Communities with hazard mitigation plans in place have a priority on receiving disaster assistance from the Federal Emergency Management Agency (FEMA). This requirement gives local communities an incentive to increase regional coordination and to integrate mitigation activities into existing plans and policies.

Roles and Responsibilities

Community Planners. Community planners, public works employees, and emergency response personnel are generally involved in the preparation of hazard mitigation plans. When developing the FEMA required Hazard Mitigation Steering team, local governments should include representatives from local military installations.

Military Planners. Military planners can bring their knowledge of potential safety threats from natural and man-made hazards within the military installation to help determine the appropriate mitigation actions.

Implementation and Maintenance

Implementation. Hazard mitigation plan recommendations are generally implemented by local communities. However, military installations should take an active role in developing and implementing any necessary mitigation actions spelled out in the plan that have bearing on the installation or military operation area.

Maintenance. Federal hazard mitigation planning regulations require local plans to be reviewed, revised, and submitted for approval to the Regional Director of the FEMA every five years. The regulations require a plan maintenance process that includes an established method and schedule for monitoring, evaluating, and updating the plan; a system for monitoring implementation of mitigation measures; and a system for reviewing progress.

Resources/References

- **Federal Emergency Management Administration (FEMA).**
<http://www.fema.gov/fima/>

Primary responsibility: ☐ Local ☒ Military

Definition

An Installation Encroachment Control Plan (ECP) includes an analysis of a Marine Corps installation's current and future encroachment situation, and an action plan presenting control strategies and actions for reducing the encroachment threat to installation missions.

Purpose

An ECP is designed to:

- Identify the full range of encroachment issues impacting the installation;
- Develop an Action Plan that promotes actions for influencing compatible land use development;
- Document problems and corrective actions for developing plans, programs, and budgets relative to encroachment; and,
- Involve multiple stakeholders in plan development and actions.

Key Issues

- An ECP is designed to discuss issues relative to the installation and the surrounding communities.
- An ECP cannot be implemented solely by the installation.
- An ECP must be in compliance with federal, state, and local land use legislation and regulations.

Roles and Responsibilities

Community Planners. State and local governments are included in the ECP planning process to provide technical advice in land use planning around Marine Corps installations in the following areas.

- Residential and commercial development

- Transportation infrastructure improvements
- Natural resources promotion and conservation
- Environmental protections
- Economic development

Military Planners. A Marine Corps installation's Community Plans and Liaison Office performs the following tasks to successfully develop and implement an ECP.

- Actively engage in legislative and regulatory processes at the local, regional, state, and federal levels to monitor and manage encroachment.
- Use land use planning tools such as the following to promote development of a long-term sustainment strategy.
 - Air Installation Compatible Use Zones (AICUZ)
 - Range Installation Compatible Use Zones (RAICUZ)
 - Range Compatible Use Zones (RCUZ)
 - Joint Land Use Study (JLUS)
- Promote planning efforts for airspace, land space, sea space, and spectrum frequency that are consistent with sustaining the installation's mission.
- Foster development of proactive partnerships and formal and informal relationships/agreements with other services, federal, state, and local agencies, private organizations, and non-profit groups.

Implementation and Maintenance

Implementation. Implementation of the ECP is dependent on the preparation and implementation of an action plan. The action plan contains encroachment control strategies and actions for reducing the threat to installation missions posed by encroachment.

Since encroachment is primarily driven by non-military entities, close coordination with local communities and planners will help in the success of the ECP. A next step in implementation could include development of a Joint Land Use Study (JLUS) with neighboring jurisdictions. The JLUS can help provide a local framework upon which a collaborative partnership can be built.

Maintenance. As with any plan, periodic review and evaluation is important. In addition to periodic reviews, major changes on the installation (such as mission changes) and in the surrounding region (such as major development proposals) can be triggers for a more comprehensive review and update.

Resources / References

- **Headquarters, U.S. Marine Corps,
Installations & Logistics Department.**
<http://hqinet001.hqmc.usmc.mil/i&L/v2/Index.htm>

Primary responsibility: ☐ Local ☒ Military

Definition

The Installation Master Plan is an Army program for developing and maintaining a long-range development plan for the installation. The following documents comprising the Installation Master Plan.

- **Existing Condition Maps.** These maps provide accurate and current information on the layout and physical conditions of the installation.
- **Master Plan Report.** This report provides a written record of existing operational and environmental conditions at the installation.
- **Tabulation of Existing and Required Facilities (TERF).** This document is an inventory of existing and long-range facility requirements corresponding to the installation's mission.
- **Future Development Plans.** These plans provide for the logical and efficient development of the installation.
- **Project Phasing Map.** This map depicts the installation's five-year construction program in relation to an overall future facilities' site plan.

Purpose

The purpose of an Installation Master Plan is to provide a concise, comprehensive description of the planning proposals designed to solve current problems and meet future needs. It also serves as a record of the analytical process and rationale by which these proposals were developed.

Key Issues

- Based upon the comprehensive analysis of on-post and off-post conditions, a summary of limitations should be prepared as per Army Technical Manual instructions. The purpose of this summary is to identify those specific conditions that

most directly affect the installation's ability to carry out its mission. These conditions/issues should then be shared with local planners so collaborative solutions can be developed.

Roles and Responsibilities

Community Planners. Although local planners are not intended users of the Installation Master Plan, there are required aspects of the plan (such as off-post data collection) where they can assist their military counterparts.

Military Planners. Army planners are responsible for the following:

- Collecting all required on- and off-post data;
- Establishing working relationships with neighboring jurisdictions and agencies for the collection of off-post data; and,
- Providing information to local entities on the future development plans of the installation.

Implementation and Maintenance

Implementation. Installation Master Plans are implemented by the Garrison Commander.

Maintenance. As with any iterative planning document, periodic review and evaluation is necessary. In addition, mission changes or other factors impacting on-post infrastructure should trigger a comprehensive review and update of the Installation Master Plan.

Resources/References

- **U.S. Army Engineering and Support Center.**
<http://www.hnd.usace.army.mil/techinfo/UFC/UFC2-000-02AN/UFC2-000-02AN.pdf>

Please see the next page.

Primary responsibility: ■ Local ■ Military

Definition

The Department of Defense (DoD) initiated the Joint Land Use Study (JLUS) program in 1985 in an effort to achieve greater implementation and application of the Air Force and Navy Air Installation Compatible Use Zone (AICUZ) programs, the Navy Range Air Installation Compatible Use Zone (RAICUZ) program, and the Army's Operational Noise Management Program (ONMP). The JLUS process encourages residents, local decision makers, and installation representatives to study issues of compatibility in an open forum with the goal of balancing both military and civilian interests. The resulting recommendations are intended to guide the local governments and the military in the implementation of appropriate controls to enhance compatibility near military installations and operations areas.

A JLUS is an excellent means of long-range, practical land use planning around military installations or operation areas. Three factors should be present when judging suitability for a JLUS:

- Incompatible land use or potentially incompatible land use from local development,
- Strong support from base leadership, and
- Good relationship between base and community.

Purpose

According to the JLUS Program Manual (2002), the primary objectives of the JLUS program are: (1) to encourage cooperative land use planning between military installations and the surrounding communities so that future community growth and development are compatible with the training or operational missions of the installation; and (2) to seek ways to reduce the operational impacts on adjacent lands. The participants in a JLUS program will review current and planned land use around a military installation and identify current

or potential incompatibilities with the military mission. The study assesses both the military's capability to adjust its mission profile to reduce impacts on the surrounding community, and the community's capacity to revise or update its plans to be more responsive to the military mission. The following objectives for communities and military installations are also important.

Community

- Protect the health, safety, and welfare of residents and maintain quality of life.
- Manage development in the vicinity of military installations that would interfere with the continued operations of these facilities.
- Provide for new growth in an economically, environmentally, and socially sustainable manner.
- Maintain the economic vitality of the community.

Military

- Promote the health, safety, and welfare of the military and civilian personnel living and working at or near the military installation.
- Ensure the ability of the installation to achieve its mission, maintain military readiness, and support national defense objectives.

Key Issues

- A JLUS defines a common policy framework for an area, but is not itself a regulatory document.
- Implementation depends on the adoption of recommended planning measures by participants, including local governments and the military.
- A JLUS is usually completed within 12 months, although the degree of coordination and complexity may substantially increase the time needed.

Roles and Responsibilities

The process of preparing a JLUS involves recognition of a range of competing and complementary interests. A successful JLUS depends on building consensus between local communities and the military installations in the area. Once jurisdictions agree to conduct a JLUS, participants must determine who will be responsible for managing the study, also referred to as the sponsor. When one or two jurisdictions are involved, a city or county planning agency may be the logical sponsor. When many jurisdictions are involved, a regional planning agency, a council of governments, or the state may be the agency necessary to achieve consensus.

A JLUS typically uses two primary stakeholder groups to build consensus, incorporate concerns, and develop practical solutions – a Policy Committee (or Advisory Committee) and a Working Group (or Technical Committee). The Policy Committee is responsible for the overall direction of the JLUS, approval of the budget, preparation of the study design, review of draft and final written reports, consideration of policy recommendations, and monitoring the implementation of any adopted policies. The Technical Committee usually consists of area planners, city and county managers and professional staff, military planners, and representatives from natural resource protection organizations. This committee is responsible for data collection, identifying and studying technical issues, and developing recommendations for further consideration by the Policy Committee.

Implementation and Maintenance

Implementation. The first step in the implementation process is the adoption of the JLUS recommendations by the Policy Committee and transmittal of the JLUS report to affected local governing bodies urging implementation through incorporation of the recommendations in the jurisdiction's general plan. It is then dependent on each jurisdiction and the

installation to adopt the findings of the report and agree to the implementation outlined. This agreement is often in the form of an MOU between the partners involved.

The implementation process can be institutionalized through creation of a permanent advisory board or commission, with representatives from each participating jurisdiction and the military. Recommendations may include:

- Adjusting specific military operations to reduce impacts on adjacent land
- Purchase of private land by the military or other federal agencies,
- Purchase of development rights and easements,
- Real estate disclosure requirements for safety or noise issues,
- Zoning and general plan designations to guide compatible development
- Siting criteria for specific uses such as cell towers and wind turbines,
- Building code changes for sound attenuation, and
- Local and state legislation.

As an incentive for communities to participate in a joint planning process, the Office of Economic Adjustment (OEA) offers matching grants for a study. The sponsoring agency is generally expected to provide a 25 percent match.

Maintenance. JLUS studies should be updated or revised whenever significant changes to land uses or military operations occur.

Resources/References

- **Office of Economic Adjustment (OEA).** OEA is the primary office of the Department of Defense with responsibility for providing adjustment assistance to communities, regions, and states adversely impacted by significant Defense program changes.
<http://www.oea.gov>

- **Joint Land Use Study, Program Guidance Manual**, August 2002.
Accessible on the OEA internet site.
<http://www.oea.gov>.
- **Cost-shared Community Planning Assistance** grants are available to state and local governments from the Office of Economic Adjustment (OEA) (*Title 10 U.S.C. Section 2391*).
- **Practical Guide to Compatible Civilian Development Near Military Installations**, July 2005
<http://www.oea.gov>
(under "Encroachment Program")

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Primary responsibility: ■ Local ■ Military

Definition

This tool is designed to address significant light sources that can cause unwanted spillover lighting (off site illumination), increasing background light in the night sky (an issue with training and the use of night vision equipment), or glare. At the local level, light and glare can be reduced through design and placement requirements in a zoning code, a stand-alone ordinance, and/or specific development conditions. The intent of these is to establish and define permitted and prohibited lighting practices to limit the obtrusive aspects of lighting. For the military, each installation has design standards that reflect the operational and security parameters appropriate for the use. For both local and military lighting, mitigations, such as shielding, may be appropriate methods for controlling unwanted illumination and glare.

Purpose

From a land use compatibility standpoint, both installation and community land uses and activities can have light and glare impacts on each other that should be considered when reviewing projects. Communities should be particularly cognizant of glare impacts on air operations. Water bodies, glass on buildings, and even vehicle windows can be a concern.

Light and glare controls allow a community to express its expectations about quality lighting. A significant amount of improvement can be achieved if the requirements are well written, implemented, and enforced. Effective shielding standards will virtually eliminate glare from a light source. They will also reduce the amount of light escaping into the sky by fifty percent or more as compared to an unshielded light source.

Key Issues

- Lighting should be evaluated on a case-by-case basis in areas of the community with different developed and natural conditions. Varying conditions will result in location specific lighting needs to reduce adverse impacts associated with these conditions.
- Reduction in glare and light intrusion can be achieved through lighting codes. Lighting codes should cover overall light reduction, focused lighting, shielding, and utilizing appropriate lighting types. Some lighting conditions can be difficult or impractical to mitigate, such as lighting for athletic fields. This should be considered when siting these uses.

Roles and Responsibilities

Community Planners. In most communities, awareness of the issues and the characteristics of quality lighting must be understood by both planners and policymakers before enacting a lighting ordinance. Once the community understands the ordinance's objectives and its necessity, the process of drafting, enacting, and implementing an appropriate code can occur.

Military Planners. Military planners can assist local entities by identifying sources of light and glare that have a negative impact on the installation's mission and ability to conduct training. Military planners can assist communities by investigating installation light and glare impacts on community residents and the environment.

Implementation and Maintenance

Implementation. Implementation and enforcement of a lighting code will have impacts on planning and code enforcement staff. In addition to the time required to review materials related to lighting, and on-site follow-up to verify compliance, the staff will need to develop some

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familiarity with lighting terms and how to reliably evaluate the effectiveness of mitigation methods.

Maintenance. Enforcement is required to ensure conformance with the standards of the lighting code. Monitoring code compliance after the project is completed is also recommended.

Resources/References

The best source for information on this topic is to consult with the local jurisdiction or military service on applicable design requirements.

Primary responsibility: ■ Local □ Military

Definition

A Military Influence Area (MIA) is a formally designated geographic planning area where military operations may impact local communities, and conversely, where local activities may affect the military's ability to carry out its mission. These areas are also referred to as: Region of Military Influence (RMI), Military Influence Planning District (MIPD), Military Influence Overlay District (MIOD), Military District Disclose District (MIDD), Airfield Influence Planning District (AIPD), and Areas of Critical State Concern (ACSC).

Purpose

An MIA is designated to accomplish the following purposes.

- Promote an orderly transition between community and military land uses so that land uses remain compatible.
- Protect public health, safety, and welfare.
- Maintain operational capabilities of military installations and areas.
- Promote the awareness of the size and scope of military training areas in order to protect areas separate from the actual military installation (i.e., critical air and sea space) used for training purposes.
- Establish compatibility requirements within the designation area, such as requirements for sound attenuation, real estate disclosure, and aviation easements.

Key Issues

- Local entities may determine that more than one MIA is needed because each MIA will serve a distinct purpose.
- When determining the boundary of a MIA, the range of applicable compatibility factors listed in Section 2 should be considered.

- When appropriate, potential mission changes should be considered in determining the MIA boundary. New weapons systems can require larger noise and safety zones.

Roles and Responsibilities

Community and Military Planners' Role. Both entities should work jointly to determine the appropriate areas and purposes of a MIA. Planners should educate local officials, residents, military personnel, and other stakeholders of the benefits and ramifications resulting from the designation of MIAs.

Implementation and Maintenance

Implementation. MIAs should be incorporated into the local planning process through the community's general plan and zoning ordinance.

Communities, in conjunction with neighboring military installations, should determine the purpose, function, and boundary for a MIA. For example, if the purpose is the disclosure of the impact of military activities on real estate, the MIA may be used to require such disclosure at the time of showing, sale, or lease contract signing.

Maintenance. Periodic review of the military's mission and the boundaries of the MIA should occur to determine its effectiveness and accuracy. The MIA should reflect any changes to the military's mission and training activities.

Resources/References

- **The City of Aurora (CO)** designates Airport Influence Districts, near Buckley AFB, which is an example of the use of MIAs.
<http://www.auroragov.org>

Please see next page

Primary responsibility: ■ Local ■ Military

Definition

A Memorandum of Understanding (MOU) is a contract between two or more government entities. The governing bodies of the participating public agencies must take appropriate legal actions, often adoption of an ordinance or resolution, before such agreements become effective. These agreements are also known as a Joint Powers Agreement or Interlocal Agreement.

California Government Code, Section 6500 et seq. allows public agencies to enter into joint agreements. The definition of public agency includes, but is not limited to, the federal government or a federal agency, the state or any state department or agency, a county, city, county board of education or school superintendent, public corporation, or public district.

Purpose

The purpose of an MOU is to establish a formal framework for coordination and cooperation. These agreements may also assign roles and responsibilities for all of the agreement's signatories. MOUs generally promote:

- Coordination and collaboration by sharing information on specific community development proposals, such as rezonings and subdivisions.
- Joint communication between participating jurisdictions and the military ensuring that residents, developers, businesses, and local decision makers have adequate information about military operations, possible impacts on surrounding lands, procedures to submit comments, and any additional local measures to promote land use compatibility around installations.
- Formal agreement on land use planning activities, such as implementation of a Joint Land Use Study (JLUS).

Key Issues

- Negotiating an MOU can take a considerable amount of resources and staff time. This is necessary, as parties signing the agreement will be bound by its terms.

Roles and Responsibilities

MOUs offer substantial advantages for laying out and documenting a common understanding on land use planning and information sharing.

Community Planner's Role. Communities should utilize their statutory right to enter into MOUs or joint agreements with federal installations. These agreements can be used to develop joint solutions to land use issues.

Military Planner's Role. Military planners can assist in providing communities with a better understanding of military missions, functions, and resources needed for mission accomplishment. Military planners can establish MOUs to create a long-term commitment to a common planning agreement.

Implementation and Maintenance

Implementation. In order to implement MOUs, local communities and military installations should work cooperatively to determine the goals, objectives, terms, roles, and responsibilities of the agreement.

Maintenance. As with any legal document, the terms and conditions of the MOU should be periodically evaluated to determine its relevance to current conditions. As conditions change, the MOU should be modified to meet the new needs. It is important to include a procedure for modifying the MOU in the text of the agreement.

Resources / References

- **Sample MOU** between an installation and local entities.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/MOUSHawAFBSep2000.doc>

Primary responsibility: ☐ Local ☒ Military

Definition

The Army's Operational Noise Management Program (ONMP) incorporates and replaces the Installation Compatible Use Zone Program (ICUZ) previously used by the Army. The ONMP is intended to promote compatible land use planning through the use of Land Use Planning Zones (LUPZs) based on noise levels.

Purpose

The primary purposes of the ONMP program are to accomplish the following initiatives.

- Protect the health and welfare of people from environmental noise generated by Army activities both on and off installations.
- Reduce the impacts of Army generated noise on communities to the extent feasible without curtailing necessary Army activities.

Key Issues

- Impacts on a community from Army installations can vary widely from aircraft noise intrusion, to vibration and dust from bombing ranges. Although the ONMP is primarily concerned with noise intrusion, all Army installation impacts on the community should be addressed in some capacity.

Roles and Responsibilities

Community Planner's Role. Local planners should actively participate in the development of the noise zones for use in the ONMP. Community planners should provide Army planners with technical advice and information on land use plans within the vicinity of the installation. To assist with ONMP implementation, community planners can:

- Inform and include neighboring military installations in the land entitlement process for projects proposed within or in close proximity to established ONMP zones. Strategies for inclusion could include inviting military counterparts to serve as ex-officio members of local planning boards and commissions, and providing information on land entitlement requests to the military installations for review and comment prior to local action.
- Review and amend, when appropriate, local planning documents (zoning ordinance, subdivision guidelines, building codes) and policies (general plan) to mitigate land use conflicts within and in close proximity to ONMP zones.

Military Planner's Role. Military planners are responsible for the following ONMP related activities:

- Identifying areas where noise levels from military sound sources are high enough to be incompatible with noise-sensitive uses such as housing, schools, churches, and hospitals. Conversely, identifying areas where off post civilian sound sources create incompatible noise environments on post.
- Complying with applicable Federal laws and regulations on the management of environmental noise.
- Maintaining an active environmental noise management program to protect the present and future operational capabilities of the installation and training areas. The accurate prediction of long-term operations at the installation can reduce future land use conflicts from neighboring incompatible land uses because it allows neighboring communities to understand installation needs.
- Assessing the effect of military noise and identifying measures to mitigate impacts on off-installation land uses.
- Maintaining a noise compliant management program and handle all

complaints with integrity, sensitivity, and timeliness.

- Continually monitoring the noise environment to verify levels are acceptable for adjacent land uses.
- Developing and procuring weapons systems and other military combat equipment that produce less noise, but are consistent with operational and mission requirements.
- Considering acquisition of property rights solely on the basis of incompatible noise levels only after all practical means of achieving acceptable levels have been exhausted, and the operational integrity of the installation's mission is threatened.

Implementation and Maintenance

Implementation. The Army is responsible for the implementation of the ONMP program. Coordination with local government entities is required by the Department of the Army. In order to ensure successful implementation, the following actions should be taken:

- Inform local government agencies of the ONMP program through formal actions (i.e., presentations to local elected officials) or informally (i.e., technical memorandum); and,
- Establish both a formal and informal network of contacts to routinely exchange planning information such as MOUs and the establishment of technical and working groups with community planners and leaders.

Maintenance. ONMPs should be periodically reviewed in accordance with Army regulations. Substantial mission and operation changes warrant a thorough review of noise zones and their potential impacts to neighboring land uses.

Resources / References

- **U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM)** provides information on the Army's Operational/Environmental Noise Management Program.
<http://chppm-www.apgea.army.mil/dehe/morenoise/>
- **US Army Environmental Center** works at all levels to assure that the Army's land base is sustainable for soldier training and weapons testing.
<http://aec.army.mil/usaec/>
- **Army Regulation 200-1, Environmental Protection and Enhancement.** 1997.
http://www.asaie.army.mil/pitoolbox/documents/ar200_1.pdf

Primary responsibility: ☐ Local ☒ Military

Definition

The Navy's Range Air Installations Compatible Use Zones (RAICUZ) program delineates the noise impacts from aerial firing ranges from other military noise sources. The program applies to all Navy and Marine Corps air-to-ground range installations in the United States and its territories. This program is similar to the Navy and Marine Corps Air Installations Compatible Use Zones (AICUZ) program and the Army's Operational Noise Management (ONMP) program. The primary focus of the RAICUZ is weapons safety. Aircraft and blast noise are also addressed, including ingress and egress to the targets on Military Training Routes (MTR).

Purpose

The RAICUZ program is designed to protect public health, safety, and welfare, and to prevent community development from degrading the operational capability of air-to-ground ranges by meeting the following objectives:

- Preclude public exposure to hazards associated with air-to-ground weapons delivery;
- Prevent incompatible land development near training range operations to reduce hazards such as low level flight, equipment and high noise;
- Protect Navy and Marine Corps investment by safeguarding the operational capabilities of ranges; and,
- Inform the public about the RAICUZ program and seek cooperation from communities to minimize potential safety issues and noise impacts on residents from air-to-ground ranges.

Key Issues

- The presence of the following factors should be considered in determining appropriate mitigation tools: low and

frequent overflights, aircraft noise, light emissions, electromagnetic and radio frequency emissions, and height of trees and other obstructions.

- Installations should review all assumptions and model inputs to ensure accurate results and determination of RAICUZ planning areas.
- All potential users, including local governments, other federal agencies, Native American Nations, etc., should be included early in the development of the RAICUZ study.
- When land use compatibility issues arise, acquisition should be the mitigation action of last resort.

Roles and Responsibilities

Community Planner's Role. Local entities should be included in the planning process and be prepared to provide technical advice to the military during the preparation of the RAICUZ. Local community capital improvement plans and general plans provide foresight into potential areas where land use conflicts may arise. These plans should be shared with adjacent military installations for their input. To assist in the implementation of the RAICUZ, community planners can perform the following actions.

- Inform and include neighboring military installations in the land entitlement process for projects proposed within or in close proximity to established RAICUZ zones. Strategies for inclusion could include inviting military counterparts to serve as ex-officio members of local planning boards and commissions or providing information on land entitlement requests to the military installations for review and comment prior to local action.
- Review and amend, when appropriate, local planning documents (zoning ordinance, subdivision guidelines, building codes) and policies (general plan) to mitigate land use compatibility within and in close proximity to RAICUZ zones.

Military Planner's Role. In general the following tasks are preformed by the military planner.

- Inform local and state governmental agencies, and other federal agencies, community groups, and the general public on (1) the requirements of military flying, (2) range operations, (3) efforts underway and planned to reduce potential off-range weapons impacts and noise, and (4) the local command's position on specific land uses.
- Monitor and comment on proposed development outside of the RAICUZ boundary to reduce its potential impacts. Development that occurs up to the RAICUZ boundary could prevent mission changes or mission expansion in the future.
- Monitor changes in base operations to determine their potential impacts on the RAICUZ study.
- Evaluate base development projects based on RAICUZ criteria and requirements.
- Discuss incompatible land use proposals in adjacent communities with local elected officials and other community decision makers.

Implementation and Maintenance

Implementation. Implementation of the RAICUZ policy is predicated upon cooperation with other federal agencies, local governments, and Native American tribes responsible for land management in areas impacted by, or adjacent to, the RAICUZ study area. Local governments are responsible for protecting their residents' health, safety, and welfare through controls like zoning ordinances, building codes, subdivision regulations, building permits, and disclosure statements. As such, success of the RAICUZ program depends on the voluntary participation, acceptance, and use by local governments,

private individuals, and other interested parties. The JLUS is an excellent means of incorporating RAICUZ recommendations in local general plans.

In order to ensure successful implementation, the following techniques should be utilized.

- Inform local governmental agencies of the RAICUZ program through formal actions (i.e., presentations to local elected officials) or informally (i.e., technical memorandum).
- Establish both a formal and informal network of contacts to routinely exchange planning information (i.e., Memorandum of Understanding, establishment of technical and working groups with community planners and leaders).

Maintenance. To maintain currency, RAICUZ studies should be reviewed every two years and updated as necessary to reflect changing operational and training requirements, new aircraft types, new weapons and delivery tactics, current levels of aviation activity, and land use development. The Navy requires the updating of weapon footprints if operations and training tactics have changes since the previous RAICUZ update.

Resources/References

- **Chief of Navel Operations Instruction, Encroachment Management,** OPNAVINST 3550.1, 1998
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV Directives links)
- **US Navy, Operational Naval Instruction (OPNAVINST) 3550.1 (1998).**
<http://neds.daps.dla.mil/Directives/3550.1.pdf>
- **Sample Memorandum of Understanding** between an installation and local planning and land use approval agencies.
<http://www.hqafcee.brooks.af.mil/ec/noise/aicuz/ProgramGuide/>

Primary Responsibility: ☒ Local ☐ Military

Definition

Prior to the transfer of real property to a new owner, California law requires sellers and/or their agents to disclose all actual know facts related to the condition of the property (California Civil Code, Section 1102). This disclosure should include noise or other proximity impacts associated with property located near a military installation or operations area.

Purpose

The purpose of real estate disclosure is to protect the seller, buyer, and sales agent from potential litigation resulting from specified conditions (i.e., hazard areas, existing easements). Real estate disclosure can be used to inform potential buyers and renters of the possible affects from nearby military installations. This disclosure can be one of the most practical and cost effective land use compatibility tools. California has enabled local governments, working in cooperation with the real estate industry, to establish noise disclosure by regulation or voluntary initiation (California Civil Code, Section 1102).

Key Issues

- For information maintained by local jurisdictions, maintaining an easy-to-access source of current and accurate information for use by real estate professionals and the public.
- For land owners, developers, and the public, an issue is having access to up-to-date information on military installations and operation areas.

Roles and Responsibilities

Community Planner's Role. Local planners should work within their communities and cooperatively with military installations and other agencies to accomplish the following tasks pertaining to real estate disclosure.

- Planners need to identify areas of disclosure for military impacts.
- Disclose compatibility issues with military installations or operations on Real Estate Transfer Disclosure Statements, as appropriate to the location.
- Educate local citizens, real estate professionals, and developers of the process and benefits of real estate disclosure.

Military Planner's Role. In cooperation with local entities, military planners can assist in the real estate disclosure process by:

- Working jointly with local planners to identify areas and topics for disclosure, and
- Providing information on potential disclosure issues to the local Board of Realtors, and the local tax assessor and property records agency.

Implementation and Maintenance

Implementation. Real estate disclosure is required by California Civil Code. In order to complete the Real Estate Transfer Disclosure Statement, sellers and their agents often depend on local planning departments for the necessary information, such as general plan and zoning maps. The key to disclosure compliance is having information on military land use compatibility factors readily available for public use. The disclosure should contain the presence and proximity of a military installation, the nature of its operations, and the potential for noise and accidents affecting adjacent properties. Cooperation with local real estate professionals and developers is essential for successful implementation.

Maintenance. For disclosure to be successful, local planning departments need a system that provides up-to-date information on military operational areas. Local and military planners can work jointly to develop the processes for communication and information exchange.

Resources / References

- State of California, Department of Real Estate, ***Disclosures in Real Property transactions.***
<http://www.dre.ca.gov/disclosures.htm>

Primary Responsibility: ☐ Local ☒ Military

Definition

A Regional Shore Infrastructure Plan (RSIP) is the Navy's version of a general or master plan. RSIPs are facility infrastructure plans that also evaluate environmental and manmade constraints in developing facility solutions. The RSIP also addresses the community's ability to provide the facility requirements through shared or joint use facilities.

Purpose

One of the main purposes of an RSIP is to achieve cost savings by eliminating infrastructure duplication by using existing off-base community facilities and services. To do this, the RSIP identifies alternatives for optimizing the use of land and facilities, and incorporates the strategic vision of the Navy through functional consolidations, regionalization, outsourcing, privatization and joint use with other DoD and federal and government entities.

Key Issues

- Data requirements for the RSIP are extensive and require the use of GIS and other advanced analysis tools.
- The RSIP process must include a regional planning component for Navy installations. This results in long-term plans that look beyond the boundaries of an installation and consider opportunities and constraints in the surrounding region.

Roles and Responsibilities

Community Planner's Role. Local planners should actively participate in the development of a RSIP, as the RSIP focuses on regional planning and looking outside the installation boundaries. Local planners should participate in the visioning process and stakeholder meetings, and provide the following information, if available.

- Current information on existing and planned land use and demographics.
- Accurate information on the biological, physical, and man-made environment (i.e., vegetation and wildlife, topography, utilities, geology, etc.).
- Current aerial photography, topographic, and cadastral information, including real estate information describing jurisdiction and installation boundaries.

Military Planner's Role. Military planners are active participants in the development of the RSIP and perform a variety of tasks pertaining to its preparation, including, but not limited to the following:

- Collection of all pertinent information needed for the facilities and areas included in the RSIP, such as community plans, topography, geology, soils, hydrology, oceanography and coastal zones, water quality, air quality, climate energy, vegetation, wildlife, archaeology, socioeconomic, community facilities and services, political structures, and built environment; and,
- Coordination with local and regional planning and political entities.

Implementation and Maintenance

Implementation. As with most general planning documents, the RSIP is implemented through the development of goals and policies, a thorough examination of existing conditions, and a detailed facilities plan.

Maintenance. Periodic review of existing conditions is advised and the RSIP should be reassessment if there is a mission change. It is recommended that an RSIP be updated on a five to ten year cycle.

Resources / References

- **Chief of Navel Operations Instruction,
Encroachment Management,**
OPNAVINST 11010.45
<http://www.navfac.navy.mil>
(available under SECNAV and OPNAV
Directives links)

Primary responsibility: ☒ Local ☐ Military

Definition

Sound attenuation refers to special construction techniques and materials designed to lower the amount of noise that penetrates the windows, doors, and walls of a building.

Purpose

Noise is defined as any unwanted sound. The introduction of a noise source into a given environment can be objectionable to nearby residents and potentially harmful, depending on the sound level. Excessive noise can impair hearing, and may also put stress on the heart, the circulatory system, and other parts of the body. Urbanization near military installations can be subjected to noise resulting from aircraft, training facilities and activities, and daily operations. Sound attenuation tools attempt to reduce the impact of military-related noise to nearby residents and the general public.

Key Issues

- The first choice in noise attenuation is avoidance. When possible, noise sensitive uses should not be located close to military installations or noise sources.
- Some land uses are more sensitive to noise, including residential development, schools, hospitals, etc.
- When evaluating noise impacts on sensitive receptors, remember to look at acceptable levels for outdoor spaces as well as indoor space.
- Noise is a cumulative condition. Programs such as the DoDs AICUZ program look at noise levels associated with typical flight operations and aircraft, but do not incorporate noise from other sound generators. Therefore, a home just outside the AICUZ 65 dBA contour may have a cumulative noise exposure of over

65 dBA when roadway noise and other local noise sources are added.

- While noise is typically measured and mitigated based on a daily average noise level, some circumstances may require an evaluation of peak noise levels.
- Retrofitting of existing structures can be expensive and cost-prohibited in certain instances.

Roles and Responsibilities

Community Planner's Role. Local and military planners should work cooperatively to identify areas where sound attenuation regulations should be implemented. At the community level, avoiding the placement of noise sensitive land use designations in high noise environments is recommended.

Military Planner's Role. Military planners can assist local entities in determining areas appropriate for sound avoidance and attenuation.

Implementation and Maintenance

Implementation. Sound attenuation standards are generally implemented through local zoning and building codes. Local building officials, inspectors, and planners should be familiar with their use and applicability in land use compatibility situations.

Maintenance. Building codes and construction standards should be reviewed and evaluated according to community needs and goals. In addition, as technological innovations in sound attenuation become available, codes and standards can be updated to allow these advanced tools and materials to be used.

Resources / References

- **Caltrans Highway Traffic Noise Abatement.** This guide provides ideas on noise attenuation that can be applied to non-highway situations as well.
<http://www.dot.ca.gov/hq/oppd/hdm/pdf/chp1100.pdf>
- **Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations,** April 2005.
<http://www.navfac.navy.mil>

Primary responsibility: ■ Local □ Military

Definition

Land cannot be divided in California without local government approval. Dividing land for sale, lease or financing is regulated by local ordinances based on the State Subdivision Map Act (commencing with Government Code, Section 66410). The local general plan, zoning, subdivision, and other ordinances govern the design of the subdivision, the size of its lots, and the types of required improvements, such as street construction, sewer lines, and drainage facilities.

There are two types of subdivisions:

- Parcel maps, which create fewer than five new lots; and,
- Tentative subdivision maps (also called tract maps), which create five or more new lots.

Applications for both types of subdivisions must be submitted to the local government for consideration.

Purpose

Subdivision ordinances set forth the minimum requirements deemed necessary to protect the health, safety, and welfare of the public. More specifically, the subdivision ordinances are designed to accomplish the following initiatives.

- Assure that effective protection is given to the natural resources of the community, especially ground water and surface waters.
- Encourage well-planned subdivisions through the establishment of adequate design standards.
- Facilitate adequate provisions for transportation and other public facilities.
- Secure the rights of the public with respect to public lands and waters.

- Improve land records by the establishment of standards for surveys and plats.
- Safeguard the interests of the public, the homeowner, the subdivider, and units of local government.
- Prevent, where possible, excessive governmental operating and maintenance costs.

Key Issues

- Subdivision approval is conditioned upon the subdivider providing public improvements such as streets, drainage facilities, water supply, and sewer service to serve the subdivision. These improvements must generally be installed or secured by bond before the city or county will grant final map approval and allow the subdivision to be recorded in the county recorder's office.
- Lots within the subdivision cannot be sold and are not legal divisions of land until a final map has been recorded. The subdivider has at least two years (and with extensions, usually more) in which to comply with the improvement requirements, gain final administrative approval, and record the final map.

Roles and Responsibilities

Community Planner's Role. In nearly all cases, the local Planning Commission is the subdivision approving authority. Upon receiving an application for a subdivision map, the city or county staff will examine the design of the subdivision to ensure that it meets the requirements of the general plan, the zoning ordinance, and the local subdivision ordinance. A public hearing must be held prior to approval of a tentative tract map. Parcel maps may also be subject to a public hearing, depending upon the requirements of the local subdivision ordinance. Approval of a subdivision plan or plat is

considered an administrative action as opposed to a quasi-judicial action.

The subdivision plat is an appropriate place to specify any special conditions placed on the use of the land, usually in the form of an easement or deed restriction.

Military Planner's Role. Participation by a military base representative on a local development review committee could decrease potential conflicts prior to development. The military planner can assist by reviewing subdivision submittals in areas potentially affected by installation operations or where new development may impact these operations. Recommendations on proposed subdivisions would assist provided to local planners prior to planning commission consideration.

Implementation and Maintenance

Implementation. Subdivision ordinances are implemented by local governments as a component of the land entitlement process. Overall guidance is provided by the State's Subdivision Map Act.

Maintenance. Periodic review and evaluation of subdivision ordinances should occur routinely, especially after the adoption of changes to the general plan or zoning ordinance.

Resources / References

- **California Subdivision Map Act (California Code, Sections 66410-66499.58).** This act establishes the standards and procedures for the approval of subdivision maps (plats) within the State of California.
http://www.opr.ca.gov/publications/PDFs/PZD_200s.pdf
- **California Land Use Planning Information Network (LUPIN).** This site provides a wealth of information on a variety of planning topics within the State of California.
<http://ceres.ca.gov/planning/>
- **A Citizen's Guide to Planning.** This is a guide to land use planning as it is practiced in California. Its purpose is to explain, in general terms, how local communities regulate land use and to define some commonly used planning terms.
http://ceres.ca.gov/planning/planning_guide/plan_index.html/#anchor189968
- **California Department of Real Estate (DRE).** DRE offers information on a variety of subdivision related topics including training opportunities, subdivision process, and a glossary of real estate terms.
http://www.dre.ca.gov/subs_sub.htm

Primary responsibility: ■ Local □ Military

Definition

Zoning is the division of a jurisdiction into districts (zones) within which permissible uses are prescribed and restrictions on building height, bulk, layout, and other requirements are defined.

Purpose

The primary purpose of zoning is the protection of public health, safety, and welfare. Refining this goal further, zoning provides opportunities for the implementation of regulations supporting land use compatibility, as shown in following examples.

- Protection against physical danger, particularly safety considerations for properties in proximity to military ranges or within military flight areas.
- Protection against nuisances associated with military operations, such as noise, vibration, air emissions, etc.
- Protection against heavy traffic flows or truck routes in residential areas.
- Protection against aesthetic nuisances impacting military installations.
- Protection against “psychological nuisances”, such as perceived and actual dangers associated with military operations.
- Protection from light and glare, air emissions, and loss of privacy.
- Provision of open space and agricultural preservation.

Key Issues

- Zoning and the general plan are inexorably tied to each other. Policies recommended within the general plan should be reflected within the zoning ordinance or development code.
- Zoning ordinances requiring rigid separation of uses or inflexible provisions can make creative solutions to land use

compatibility, such as cluster development, difficult or impossible.

- When designating military compatible use districts, the ordinance should recognize that the local community has no regulatory control over development or activities on federal property.

Roles and Responsibilities

Community Planner’s Role. Local jurisdictions possess sole responsibility for implementing their zoning ordinance, or development code. As such, local planners should be familiar with their jurisdiction’s zoning ordinance and its potential use as a tool in promoting land use compatibility with neighboring military installations. Community planners should work cooperatively with military planners to determine applicable regulations and should invite military planners to review draft ordinances prior to adoption.

Military Planner’s Role. Military planners can assist by working jointly with local jurisdictions in determining potential applications of a local jurisdiction’s zoning ordinance to resolve land use compatibility issues. Examples of collaboration include identifying areas for inclusion within various overlay zoning districts pertaining to military operations and determination of appropriate land uses and/or land use intensities in proximity to military installations.

Implementation and Maintenance

Implementation. There are several ways in which a zoning ordinance can improve land use compatibility between military installations and surrounding jurisdictions. One of the primary zoning tools includes the use of Overlay Zoning Districts.

An overlay district is an additional zoning requirement placed on a geographic area, but does not change the underlying zoning. Overlay zoning is used for dealing with special situations or accomplishing special goals, such as land use

compatibility with neighboring military installations. Applicable zoning overlay districts include the following types.

- **Airport Overlay District.** An Airport Overlay Zone is a zone that promotes compatible land uses for specific distances around airports. An Airport Overlay Zone applies additional conditions or restrictions to a specified area while retaining the existing base zoning classification. This zone can be highly effective in addressing a number of potential incompatibilities with airports and airport operations. For example, the Airport Overlay Zone may limit the height of objects surrounding an airport, restrict uses producing conditions that may be hazardous to air navigation (e.g., smoke, glare), and limit uses that are noise-sensitive.
- **Airport Development Zoning.** This type of zoning is applied to areas around an airport identified for airport related and dependent uses. It often replaces industrial, public facility or other designations currently given to the airport site and immediate vicinity. The Airport Development Zone can also be a base zoning district that identifies outright and conditionally permitted uses on airport property. This district may be most applicable to joint use airports where local jurisdictions share facilities within a military installation.
- **Military Influence Area/District (see Tool 22).** A military installation area/district is intended to recognize the location of military installations within or adjacent to a community. Specific uses or regulations are generally established within these areas.
- **Agricultural Overlay District.** Agricultural overlay districts exist to promote agricultural land uses, protect prime soils, and prevent non-agricultural uses from negatively impacting

agriculture as the primary land use. These areas can be used to provide appropriate buffers surrounding military installations.

- **Planned Development District.** A Planned Development (PD) District can be a base district, a floating zone, or could be adopted as an overlay zone depending on city desires. PDs are designed to encourage the efficient use of land and resources, promote greater efficiency in public and utility services, and encourage innovation in the planning, design, and building of all types of development. Generally, communities can establish development standards favoring land use compatibility.

Other tools that generally are, or can be, implemented through zoning ordinances are discussed in more detail within this Handbook, including:

- Avigation Easement (see Tool 5)
- Cluster Development (see Tool 8)
- Conditional Use Permit (see Tool 10)
- Conservation Easement (see Tool 11)
- Light and Glare Controls (see Tool 21)
- Military Influence Area (see Tool 22)
- Real Estate Disclosure (see Tool 26)
- Sound Attenuation (see Tool 28)

Maintenance. Zoning regulations should be periodically reviewed for effectiveness and applicability. A comprehensive review of the entire zoning ordinance, or development code, should occur in conjunction with an update to the community's general plan.

Resources / References

- ***Airport Land Use Planning Handbook***, prepared by the California Department of Transportation (Caltrans) Division of Aeronautics. January 2002.
<http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php>
- ***A Model Zoning Ordinance to Limit Height of Objects Around Airports*** (FAA Advisory Circular AC 150/5190-4A), prepared by the FAA, December 14, 1987.

Sample Military Compatible Use District

The following provisions provide examples of regulations and/or policies for inclusion within Airport Overlay Zoning Districts.

1. **Visual and electrical interference.** Notwithstanding any other provisions of these regulations, no use shall be made of land within the Military Airport Overlay Zones in such a manner to:
 - a. Release into the air any substance which would impair visibility or otherwise interfere with the operation of aircraft, e.g. steam, dust, smoke, etc.;
 - b. Produce light emissions, either direct or indirect (reflective) which would interfere with pilot vision;
 - c. Produce electrical emissions which would interfere with aircraft communication systems or navigational equipment; or
 - d. Attract birds or waterfowl, or in any other manner constitute an airport hazard.
2. **Storage of flammables.** The provisions of this section shall apply throughout the Military Airport Overlay Zones.
 - a. **Solid Materials**
 - i. The storage or manufacture of flammable solid materials or products is permitted only if the flammable material or products are stored or manufactured within completely enclosed buildings having noncombustible exterior walls and protected throughout by an automatic fire extinguishing system.
 - ii. The storage or manufacture of explosive materials and of materials or products that decompose by detonation is prohibited.
 - b. **Liquid Materials**
 - i. The manufacture of flammable or combustible liquids or materials that produce flammable or combustible vapors or gases is prohibited.
 - ii. The storage of flammable and combustible liquids, or of materials that produce flammable or combustible vapors or gases, shall be permitted only in accordance with the Uniform Fire Code (or applicable regulations).
3. **Height Regulations.**
 - a. No structure shall be constructed or maintained so that it exceeds the greater of:
 - i. Thirty-five feet above ground elevation (*or applicable height limitation as set by jurisdiction in cooperation with the neighboring military installation*); or
 - ii. The maximum height permitted under FAR part 77, subpart C, as depicted on any airport height zone map as adopted by the jurisdiction.
4. **Subdivision Public Reports.** Subdivision public reports shall disclose the location of the Airport and potential aircraft overflights. The following statement shall be included in the public report: "This property, due to its proximity to (military airport), is likely to experience aircraft overflights, which could generate noise levels which may be of concern to some individuals."
5. **Avigation Easement.** The owners of a new development within the overlay district, including mortgagees, other lien holders and easement holders, shall execute an avigation easement prior to or concurrently with the recordation of any final plat or approval of a final Design Review plan for the new project.